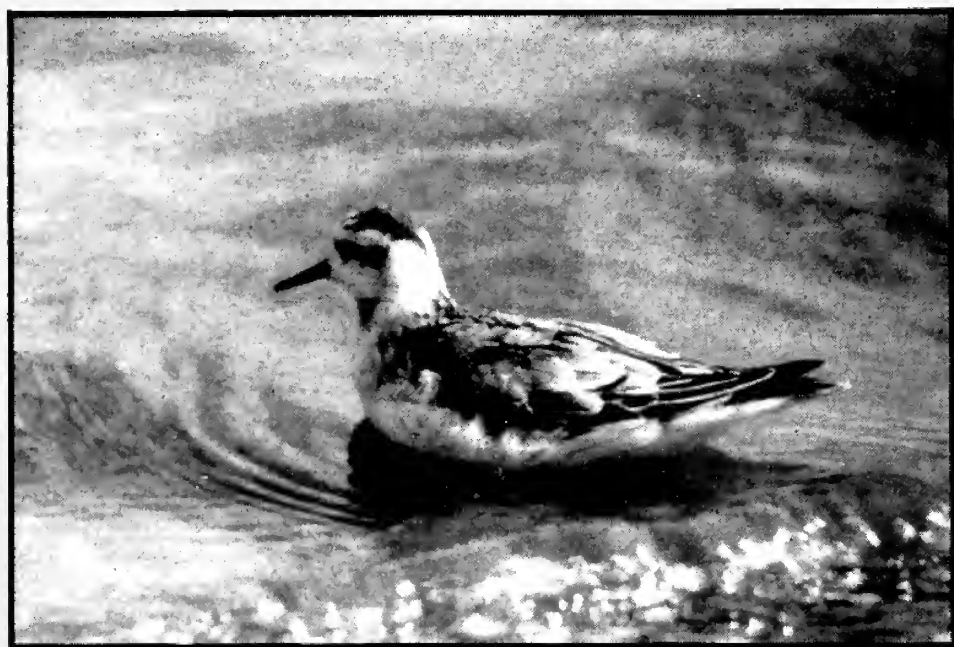


IOWA BIRD LIFE

Spring 1992 Volume 62 Number 2



IOWA ORNITHOLOGISTS' UNION

IOWA BIRD LIFE

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Volume 62, Number 2

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FRONT COVER: Red Phalarope at Saylorville Reservoir, 28 September 1991. Photograph by Reid Allen.

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The IOWA ORNITHOLOGISTS' UNION, founded in 1923, encourages interest in the identification, study, and protection of birds in Iowa and seeks to unite those who have these interests in common. *Iowa Bird Life* and *I.O.U. News* are quarterly publications of the Union.

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James J. Dinsmore, Editor, 4024 Arkansas Drive, Ames, IA 50010
Carl J. Bendorf, Spring and Fall Field Reports Editor, 845 Cypress Ct., Iowa City, IA 52245
James J. Dinsmore, Summer Field Reports Editor, 4024 Arkansas Dr., Ames, IA 50010
James L. Fuller, Fall Field Reports Editor, 6 Longview Knoll, RR 6, Iowa City, IA 52240
Thomas H. Kent, Spring and Fall Field Reports Editor, 211 Richards St., Iowa City, IA 52246
W. Ross Silcock, Christmas Bird Count & Winter Field Reports Editor, Box 300, Tabor, IA 51653

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Original manuscripts, notes, letters (indicate if for publication), editorials, and other materials relating to birds and bird finding in Iowa should be sent to the editor. Accepted manuscripts will generally be published promptly, depending on space available, with the following absolute deadlines: 15 November for the Winter issue; 15 February for the Spring issue; 15 May for the Summer issue; and 15 July for the Fall issue. Most manuscripts will be refereed. All material should be typed double-spaced or hand printed in ink on 8 1/2 by 11 inch paper. Authors should pattern their style after a current issue of the journal. If you want more detailed guidelines or advice regarding the appropriateness of your topic for *Iowa Bird Life*, send a self-addressed stamped envelope to the editor. Manuscripts may also be submitted on computer disk (Word 4.0 for Macintosh or compatible programs). Please submit one printed copy of the manuscript with the disk.

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MEET AN IOWA BIRDER-CARL KURTZ

HANK ZALETEL

Many of our readers have viewed in awe the photographs of Carl Kurtz in the Iowan magazine or in a score of other environmental, regional, and national publications.

I first experienced Carl's artistry about 15 years ago while reading a National Audubon publication. A Yellow-headed Blackbird, its black body and yellow head glowing against a background of green cattails, literally jumped from the page at me.

I often wondered how he managed to produce such flawless works of art. Was it artistic ability, luck, or hard work? Reflecting on this question, Carl stated that it was about 1% artistry and 99% hard work. Knowing your camera, the various types of films, the nature of your subject, and planning greatly improves ones prospects of a good photo.

Carl was born on 28 July 1945 and has lived on the family farm just west of St Anthony in Marshall County to this day. He attended school in St. Anthony and State Center and graduated from West Marshall High School in 1963. He attended St. Ambrose College in Davenport for two years and then transferred to Iowa State University where he graduated in 1968 with a degree in Fisheries and Wildlife Biology. He then served in the army for the next two years.



His interest in the outdoors and especially birds began when he was seven or eight years old when he began to hunt. This interest continued until about his junior year in college when he took up photography because, in his words, you could hunt all year with a camera and you didn't need a license. Likewise, since much of the work in the environmental field consists of public relations, what better way to get your point across than by using a visual image.

After leaving the service, he continued photographing birds and outdoor scenes for the Iowan magazine and the Des Moines Register Picture Magazine. In the early 1980's, he began submitting work to a variety of special interest publications (landscape magazines, advertising stills), state tourism promotions, and regional magazines.

Until just recently, 1988, he farmed the family homestead, the previous tenant's indifference and neglect of the land being his chief motivation. Also during this time, he taught an elective course on natural history photography at Iowa State University.

When I asked Carl what advice he would give to an aspiring bird photographer, he stated that the person needed to watch, listen, and study the bird in question. Knowing where they perch, their nesting behavior, their calls, in other words knowing the habits of the bird so well that you could anticipate what it would do in a given situation, these were the keys to a good photo.

Carl keeps a life list. He has birded in Africa and Europe but he couldn't tell me how many birds he has seen. He is most interested in learning about their behavior. In fact, one of the most important reasons he watches birds is to learn of their habitat requirements. With this knowledge, he believes the necessary steps can be taken to preserve these areas and insure their survival.

Carl joined the I.O.U. in 1975. Just two years later he was enlisted to serve as Vice President, an office he held for two years, 1977-1979. During the next two years, Carl served as President of both the I.O.U. and the Iowa chapter of The Nature Conservancy. During these years, state meetings for both organizations were held concurrently, one having meetings in the morning and the other in the afternoon.

When I asked Carl about the many awards he had won, he stated that they were not significant or important. He felt that what he did was something that he should do. This feeling of obligation was generated by a faith in God that he was doing the right thing at the right time.

In 1983, Carl went on a photo trip to Africa sponsored by the Minnesota Science Museum. On the trip he met Linda Brown who became his wife in 1988.

At one time Carl gave more than 50 presentations a year to bird clubs, service organizations, and student groups. The Central Iowa Ornithologists' bird club of Marshalltown even persuaded him to serve as chair of their club on two different occasions. Since 1985, he has curtailed his public programs to ten or fewer a year.

Today, Carl and Linda have organized week long photo seminars. The participants are immersed in the natural environment from 5 in the morning to 10 at night. This schedule has been set up to force participants to change their perspectives. It has made them look at their surroundings at times when their normal daily routines prevented them from doing so. Hopefully, they would discover something new and beautiful in nature.

Carl started planting prairie seeds on portions of his land because, in his words, he got tired of chasing cows and fixing fences. He was able to lease the land to the county conservation board for the same amount that he was receiving for grazing it. From this simple beginning, more than 50 acres of his farm are now prairie. He

continues to harvest the seed from these plantings and is serving as a prairie consultant to the Walnut Creek National Wildlife Refuge project.

Carl continues to take pictures and is currently working on a book of essays dealing with nature and the environment; it will be illustrated with his photographs. No publication date has been set.

715 West Street, Colo, IA 50056

AMERICAN ROBINS USE OF OLD NESTS AS CUES FOR NEST-SITE SELECTION IN CENTRAL IOWA

SCOTT A. KELCHNER

When American Robins arrive at their Iowa nesting grounds, little information is available to them about the suitability of a potential nest site. The abundance of food, potential foliage cover, and the possibility of predation are all important factors in selecting a nest site. Therefore, indirect clues such as the presence of a nest from a previous nesting season could be a good predictor of future nesting success (Erckmann et al. 1990).



In a study of Red-winged Blackbirds, Erckmann et al. (1990) suggested that females could use old nests as an indicator of the overall quality of a breeding area and as a basis for nest-site selection. They suggested that species other than Red-winged Blackbirds might use old nests in this manner.

This study is concerned with the possibility that a nest from a previous breeding season is a cue for the American Robin in determining a nesting site.

METHODS

Robin nests were studied on a 26-hectare area of Iowa State University campus in Ames. The predominant vegetation consisted of small trees and shrubs. There were many open grass areas providing food for robins. Data were collected on 20 and 21 April 1991, the peak of initial nesting by robins in Ames (Klimstra and Stieglitz 1957).

All shrubs and trees in the study area were searched for old robin nests from previous years and for new nests built in the preceding month. Nests that were in the process of being built were included as new nests. Information about the nest location, tree or shrub type, old nest condition, and proximity of new nests to old nests were recorded for each nest encountered.

Old nest condition was assessed on five levels: 1) Very good--nests that were nearly or entirely whole with tight-woven materials intact; 2) Good--nests that were mostly whole with 50-70% of the original building material intact; 3) Moderate--nests that were 30-50% intact; 4) Poor--nests that were less than 30% intact yet still had a characteristic robin nest shape; and 5) Very poor--nests consisting mainly of mud with a few pieces of grass and other building materials.

New nests located on top of or in the same bush as old nests were considered as existing in previous nesting sites.

RESULTS

A total of 36 nests were found. Thirteen of these were new nests and 23 were old nests. Fourteen of the old nests were in sites containing no new nests, and 10 old nests were in sites that currently contained new nests. Nine of the new nests (69%) were in sites containing old nests, and four were in sites with no old nests present. One site contained three nests, two old and one new.

NEST LOCATION

Approximately 70% of all nests encountered were located in coniferous species, and 30% were in deciduous species (Table 1), although only 35.5% of available plants were conifers. In a previous study at Iowa State, 54% of robin nests were in deciduous species and 34% were in coniferous species (Willson 1978). However, in that study robins also showed a seasonal preference for conifers in the early spring, with 61% of the nests placed in conifers. Howell (1942) found that 58% of early robin nests were in coniferous species, and 25% in deciduous species.

Table 1. Location of new and old American Robin nests on the Iowa State University campus in late April 1991.

| Tree type | New Nests | | Old Nests | | Total Nests | |
|------------|-----------|-----|-----------|-----|-------------|-----|
| | Number | % | Number | % | Number | % |
| Deciduous | 5 | 38 | 6 | 26 | 11 | 31 |
| Coniferous | 8 | 62 | 17 | 74 | 25 | 69 |
| Totals | 13 | 100 | 23 | 100 | 36 | 100 |

CONDITION OF OLD NESTS

Assessing the condition of old nests showed that 79% of old nests in sites with no new nest were in moderate, poor, or very poor condition (Table 2). All old nests located in sites with new nests were in good or very good condition.

Table 2. Condition of old American Robin nests with and without new nests at the same site on Iowa State University campus in late April 1991.

| | Condition of Old Nest | | | | |
|-------------------------------|-----------------------|------|----------|------|-----------|
| | Very Good | Good | Moderate | Poor | Very Poor |
| With new nest on same site | 3 | 6 | 0 | 0 | 0 |
| Without new nest on same site | 0 | 3 | 4 | 3 | 4 |

DISCUSSION

Although Erckmann et al. (1990) found no overall tendency for female Red-winged Blackbirds to select sites with old nests, I found 69% of early arriving robins established first nests in sites containing old nests. However, the observation of Howell (1942) that returning robins often build new nests on top of their nest from the previous season might account in part for the six nests built directly on top of old nests.

Klimstra and Stieglitz (1957) found that without exception, female robins searched several possible locations before establishing a nesting site. Most sites used by early arriving robins were in conifers, although conifers made up only 35.5% of available sites. If several possible nesting sites have good foliage cover, then the deciding factor in selecting between sites might be the presence of an old nest.

The high percentage of early nests in conifers observed in this study as well as by Howell (1942) and Willson (1978) suggests that a good early nest site for robins includes much foliage to provide cover for the nest. I found that a high percentage of surviving old nests were in coniferous trees and shrubs (Table 1), presumably because of better protection from weather. If a surviving nest is an indication of a past successful breeding site, then it would be reasonable to expect robins to select for those sites containing an old nest. Thus, the early arriving robins may select nest sites in conifers because of the many existing old nests as well as a high amount of foliage cover.

The condition of old nests seems to have some relevance to nest-site selection by robins. If old nests serve as cues to successful nesting sites, old nests in good to excellent condition might be selected over old nests in moderate to very poor condition. The poor condition of an old nest may be due to its survival through more than one nesting season. If this is so, possibly robins are selecting for the most successful nesting sites.

Unfortunately, time did not permit a more complete study. The marking of juvenile robins at a nest site would help determine if robins return to their original nest sites as adults. A test of placing a robin nest of good condition in a suitable nesting site would show more conclusively if robins select a site by the presence of an old nest in good condition. However, the high correlation of placing new nests near old nests in this study warrants further consideration of the relevance of old nests in nest-site selection.

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146 H University Village, Ames, IA 50010

WILD TURKEY PRODUCTION IN IOWA DURING 1991

DEWAINE H. JACKSON

Every July and August, the Iowa Department of Natural Resources (IDNR) conducts a postcard survey to estimate statewide Wild Turkey production. Individuals interested in Iowa's Wild Turkeys are issued survey cards to document observations of turkey flocks. Once these survey cards are returned to the IDNR and analyzed, turkey reproductive estimates are derived. The state is divided into seven large geographical regions, and estimates are made for each region and for the entire state.

RESULTS

During 1991, 1,346 brood or individual hen observations were reported and used to make production estimates. Five of the seven survey regions had declines in both the number of poults/hen and the percentage of hens with broods compared to the average values for the last 5 years. Two regions (the northwest and north-central) were added to the survey in 1990 and have only 2 years of data on which to make comparisons.

The 1991 statewide poult production of 4.5 poults/hen was 12% less than in 1990. This is the fourth straight year of lower than average poult/hen ratios. Iowa's long-term average production is 6.4 poults/hen. Prior to the last 4 years, the lowest statewide ratio since 1977 was 6.3 poults/hen (Table 1). In addition to a low poult/hen ratio, only 51% of the hens statewide were observed with broods during 1991, the lowest documented (Table 2). The production index (which is an estimate of the number of poults/hen including hens observed without broods) indicates the last 4 years are relatively similar, but dramatically below 1983-87 (Figure 1). Additional supporting evidence of the poor production has been the reduction in hunter success rates during the last couple years, during both spring and fall season.

By region, the following trends have been noted:

Northeast Region: The northeast region's 1991 production index was less than 1990 because a lower percentage of hens was observed with broods. However, this region still maintains the best 2-year overall production values (Table 2).

Southern Region: The southern region had its lowest poult/hen ratio ever documented and nearly the same percentage of hens with broods as last year. Thus, this region's production index is less than 1990's and nearly the worst statewide.

Central Region: The central region had extremely poor poult production, the second lowest poult/hen ratio and percentage of hens observed with broods ever documented in the region. The poult production in central Iowa has not been sufficient during the last 2 years to stabilize the population. Our population model indicates 3.7 poults/hen are required to maintain current population levels (assuming a fall harvest similar to 1990's). The production index for the central region is the lowest in the state.

Western Region: The western region had worse poult production this year than last but the percentage of hens with broods increased. Overall 1991 production was nearly the same as in 1990.

East-central Region: The east-central region data indicate slightly better poult production and a higher percentage of hens with broods than in 1990. Both 1991 values are not much different than their respective long-term averages. This region

Table 1. Iowa wild turkey brood survey results by region for birds/flock and young/adult, 1976-present.
Y/A=young per adult and B/F=birds per flock.

| YEAR | NORTHEAST | | SOUTHERN | | CENTRAL | | WESTERN | | EAST-CENTRAL | | NORTHWEST | | NORTH-CENTRAL | | STATEWIDE | |
|---------|-----------|------|----------|------|---------|------|---------|------|--------------|------|-----------|------|---------------|-----|-----------|------|
| | Y/A | B/F | Y/A | B/F | Y/A | B/F | Y/A | B/F | Y/A | B/F | Y/A | B/F | Y/A | B/F | Y/A | B/F |
| 1976 | | | 4.2 | 10.4 | | | | | | | | | | | 4.2 | 10.4 |
| 1977 | | | 7.3 | 10.3 | | | | | | | | | | | 7.3 | 10.3 |
| 1978 | | | 7.5 | 10.7 | | | | | | | | | | | 7.5 | 10.7 |
| 1979 | | | 7.1 | 13.1 | | | | | | | | | | | 7.1 | 13.1 |
| 1980 | | | 7.1 | 13.3 | | | | | | | | | | | 7.1 | 13.3 |
| 1981 | 8.2 | 15.5 | 7.3 | 10.7 | | | | | | | | | | | 7.5 | 11.9 |
| 1982 | 6.1 | 12.6 | 6.2 | 9.3 | 7.1 | 9.5 | 6.6 | 9.5 | | | | | | | 6.3 | 10.5 |
| 1983 | 6.0 | 13.2 | 6.3 | 11.3 | 6.2 | 11.4 | 6.6 | 11.7 | 6.0 | 11.7 | | | | | 6.3 | 12.1 |
| 1984 | 6.6 | 12.9 | 7.4 | 11.5 | 4.6 | 10.6 | 6.9 | 12.6 | 6.8 | 10.9 | | | | | 6.8 | 11.9 |
| 1985 | 7.2 | 16.7 | 7.4 | 14.3 | 6.1 | 11.4 | 7.1 | 11.3 | 6.8 | 14.2 | | | | | 7.1 | 14.4 |
| 1986 | 7.0 | 14.1 | 6.2 | 11.8 | 6.6 | 11.7 | 5.7 | 9.3 | 6.8 | 12.5 | | | | | 6.6 | 12.4 |
| 1987 | 7.0 | 17.3 | 6.5 | 12.2 | 7.4 | 13.5 | 5.9 | 12.5 | 7.0 | 14.5 | | | | | 6.8 | 14.2 |
| 1988 | 5.0 | 17.1 | 5.6 | 10.1 | 5.3 | 11.3 | 4.6 | 12.6 | 6.5 | 14.3 | | | | | 5.4 | 13.6 |
| 1989 | 4.1 | 16.1 | 5.1 | 10.0 | 4.4 | 10.7 | 5.5 | 13.0 | 5.3 | 14.5 | | | | | 4.7 | 13.3 |
| 1990 | 5.1 | 15.8 | 4.9 | 9.0 | 2.7 | 7.9 | 6.0 | 12.2 | 4.9 | 11.9 | 7.7 | 11.3 | 6.6 | 8.3 | 5.1 | 12.8 |
| 1991 | 4.7 | 14 | 4.1 | 9.7 | 3.3 | 9.5 | 4.8 | 14.5 | 5.1 | 11.5 | 6.8 | 10.2 | 4.3 | 7.4 | 4.5 | 11.8 |
| FYavg * | 5.6 | 16.1 | 5.7 | 10.6 | 5.3 | 11.0 | 5.5 | 11.9 | 6.1 | 13.5 | 7.7 | 11.3 | 6.6 | 8.3 | 5.7 | 13.3 |
| LTavg** | 6.2 | 15.1 | 6.4 | 11.2 | 5.6 | 10.9 | 6.1 | 11.6 | 6.3 | 13.1 | | | | | 6.4 | 12.3 |

* =five-year average, 1986-90

** =long-term average, 1976-90

Table 2. Iowa wild turkey brood survey results by region for reports and percent hens with broods, 1976-present. #=total reports and %=hens with broods.

| YEAR | NORTHEAST | | SOUTHERN | | CENTRAL | | WESTERN | | EAST-CENTRAL | | NORTHWEST | | NORTH-CENTRAL | | STATEWIDE | |
|----------|-----------|------|----------|------|---------|------|---------|------|--------------|------|-----------|------|---------------|------|-----------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| 1976 | | | 78 | | | | | | | | | | | | | |
| 1977 | | | 98 | | | | | | | | | | | | | |
| 1978 | | | 77 | 80 | | | | | | | | | | | | |
| 1979 | | | 170 | 80 | | | | | | | | | | | | |
| 1980 | | | 142 | 57 | | | | | | | | | | | | |
| 1981 | 65 | 65 | 194 | 57 | | | | | | | | | | | 259 | |
| 1982 | 118 | 62 | 163 | 60 | 31 | 42 | 10 | 23 | | | | | | | 322 | |
| 1983 | 117 | 75 | 148 | 69 | 34 | 67 | 40 | 57 | 77 | 46 | | | | | 416 | 65 |
| 1984 | 106 | 78 | 134 | 78 | 13 | 84 | 41 | 54 | 76 | 53 | | | | | 370 | 70 |
| 1985 | 133 | 81 | 229 | 82 | 42 | 94 | 47 | 57 | 165 | 65 | | | | | 616 | 76 |
| 1986 | 191 | 74 | 236 | 63 | 42 | 55 | 65 | 64 | 137 | 55 | | | | | 671 | 64 |
| 1987 | 266 | 77 | 353 | 61 | 79 | 78 | 70 | 72 | 138 | 71 | | | | | 906 | 69 |
| 1988 | 379 | 72 | 394 | 45 | 138 | 79 | 90 | 69 | 278 | 60 | | | | | 1,279 | 62 |
| 1989 | 364 | 72 | 408 | 54 | 92 | 38 | 137 | 46 | 303 | 54 | | | | | 1,304 | 57 |
| 1990 | 421 | 66 | 257 | 46 | 38 | 59 | 118 | 38 | 303 | 49 | 18 | 46 | 28 | 14 | 1,183 | 54 |
| 1991 | 368 | 57 | 418 | 47 | 78 | 40 | 105 | 46 | 346 | 55 | 22 | 46 | 9 | 35 | 1346 | 51 |
| FYavg * | 324.2 | 72.2 | 329.6 | 53.8 | 77.8 | 61.8 | 96.0 | 57.8 | 231.8 | 57.8 | 18.0 | 46.0 | 28.0 | 14.0 | 1068.6 | 61.2 |
| LTAvg ** | 216.0 | 72.2 | 205.4 | 64.0 | 56.6 | 66.2 | 68.7 | 53.3 | 184.6 | 56.6 | | | | | 732.6 | 64.6 |

* = five-year average, 1986-90

** = long-term average, 1976-90

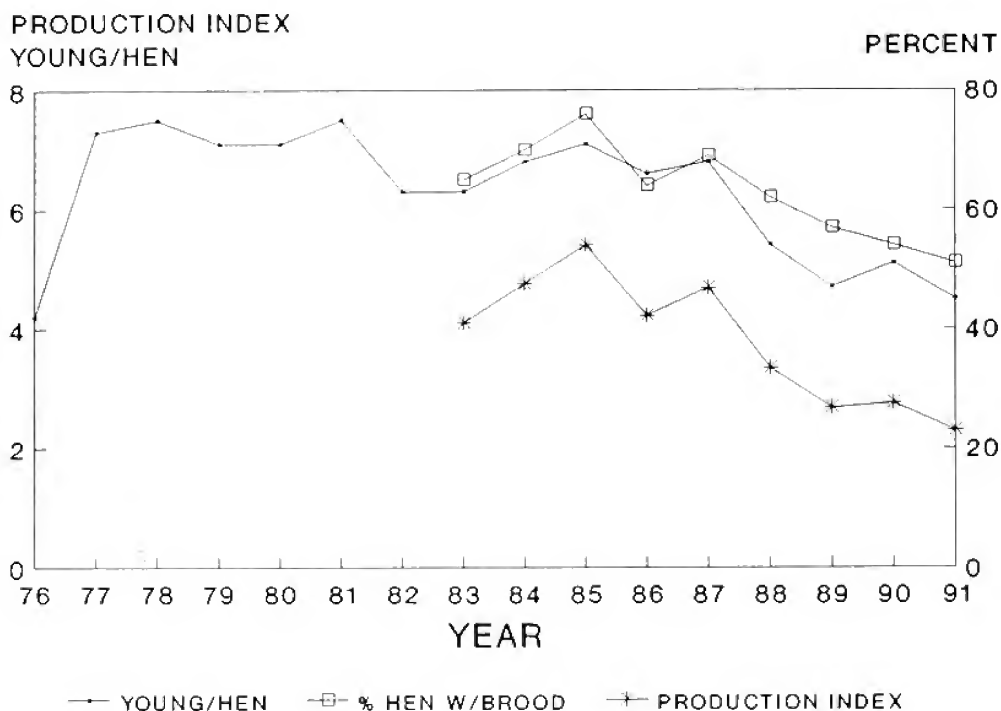


Figure 1. Iowa wild turkey brood survey results 1976-91.

and the north-central were the only regions in which the production index increased from 1990.

Northwest and North-central regions: Both of these regions have recently been added to the brood survey and data are insufficient to make valid comparisons.

DISCUSSION

Climatic and habitat conditions during nesting, increased predation, increased public disturbance of nesting hens, and numerous additional variables have all been suggested as causes for poor production. More than likely, it is an interaction or combination of several independent variables causing reduced poult production.

The IDNR is concerned with present Wild Turkey production levels and would like to increase the sample size used to make a production estimate. Bird enthusiasts are often overlooked in sampling schemes where the original cooperator list was generated from landowners in the area of a Wild Turkey release and from hunting licenses. I urge anyone interested in Wild Turkeys that presently does not receive brood observation forms from the IDNR to contact me.

Iowa DNR, Wildlife Research Station, 1436 255th Street, Boone, IA 50036

CHRISTMAS BIRD COUNT 1991-92

W. ROSS SILCOCK

The recently published directory of I.O.U. members proved too much of a temptation to me, prompting letters to members pleading to them to start a count in parts of Iowa that presently lack a count. The response was great, leading to a new record of 48 counts. Perhaps 50 next year? Or perhaps we should concentrate on quality by trying to have at least three field parties, one feeder location, and some owling for each count. New counts were from the Northern Third (Wapsi-Great Western Line and Paullina), Middle Third (Ida County), and Southern Third (Union County and Montgomery County)(see Figure 1). The latter four counts were run by county conservation board personnel, and all five new counts are in interesting areas. Absent from last year were Swaledale and Algona, and returning after misses last year were DeSoto N.W.R. and Spirit Lake. Cedar Falls is now listed as Cedar Falls-Waterloo, and Waterloo is listed as Bremer County.

Count data are in Table 1, although some counts did not submit data. Most obvious was the mild weather and lack of snow cover this year. Only counts in the Northern Third had much snow, with four inches at Paullina the most. All other regions were essentially snowless. Amazingly, no count was held in below zero temperatures, and only two were in single digits. By far the coldest count was Bremer County, which stayed at 2 degrees all day. Warmest was the balmy high of 46 at Ida County.

In all, a good total of 636 observers in 260 field parties logged 1,881 field party-hours finding 571,301 birds (see Table 2). This gives an average count profile of 14 observers in six parties, each party birding for 6 or 7 hours. This is good coverage; it should be considered a goal for all counts to shoot for. It is much better to split a group of four into two parties, at least for part of the day.

The results in terms of total numbers of birds found were about average, even though several observers thought birds were a little scarcer than usual.

The species count was among the best ever, at 129 ranking third behind the amazing 138 in 1990-91 and 131 in 1988-89. After last year's attempt to establish a "clean" all-time Iowa CBC list, I tried again, matching records of the rarer species with the official Iowa list and with accepted records in "Iowa Birds" (Dinsmore et al, 1984). I concluded that the all-time list stands at 188, compared to my estimate last year of 193. Species which have been reported but which I consider to be inadequately documented as having occurred on an Iowa CBC (and I would love to be proved wrong) are as follows: Trumpeter Swan (not on official state list), Broad-winged Hawk, Swainson's Hawk (Records Committee will consider a possible from this year's count), Common Peafowl (are they established yet?), Spotted Sandpiper, Iceland Gull, Ivory Gull, Caspian Tern, Ringed Turtle-Dove, Monk Parakeet (these two not established nor on state list), Common Raven, Swainson's Thrush, Gray-cheeked Thrush, Wood Thrush, Dickcissel, Lark Sparrow, Henslow's Sparrow, Chestnut-collared Longspur, and Rosy Finch.

Davenport was again the leader in species reported with an excellent 88 (Trumpeter Swan was deleted; see above). There were five counts in the 70s, considered "big-time" in Iowa: Keokuk at 76, Cedar Rapids an outstanding 75 for an "inland" count, Clinton and Saylorville Reservoir tied at 72, and a great total of 70 at Red Rock Lake. These counts represent all regions except the Northern Third and the Missouri Valley. To be fair, the Northern Third competes at a disadvantage, and the leader there

Table1. Site Data for 1991-92 Christmas Bird Counts

| Location | Date | Species | Total Birds | Total Obs | Field Pts | Miles Hr | Owling Ft | Feeder Hr | Temp L | Snow Depth | Wind | Sky am/pm | | | | | |
|-------------------|--------|---------|----------------|--------------|--------------|-------------|--------------|--------------|-----------|---------------|------|--------------|----|----|--------|----------------|-----------------|
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | |
| 1. YellowRivFor | 29Dec | 43 | 3135 | 11 | 6 | 42 | 258 | 18 | 1 | 4 | 1 | 25 | 34 | 3 | W 5-10 | cldy/ptly cldy | |
| 2. Dubuque | 21Dec | 43 | 3612 | 26 | 7 | 44 | 225 | 20 | 0 | 0 | 1 | 1 | 22 | 25 | 0 | 0 | ptly cldy/fog |
| 3. Clinton | 28Dec | 72 | 10288 | 13 | 4 | 36 | 363 | 8 | 2 | 36 | 0 | 0 | 31 | 34 | 0 | NNE 5-10 | cloudy |
| 4. Princeton | 19Dec | 62 | 5879 | 10 | 6 | 36 | 371 | 13 | 5 | 72 | 2 | 4 | 7 | 32 | 0 | SE 2-18 | clr/ptly cldy |
| 5. Davenport | 21Dec | 88 | 17850 | 26 | 11 | 64 | 477 | 28 | 7 | 63 | 18 | 36 | 16 | 28 | 0 | NW 20-30 | clear |
| 6. Muscatine | 21 Dec | 62 | 10677 | 8 | 4 | 33 | 357 | 9 | 4 | 40 | 7 | 14 | 28 | 29 | 0 | W 0-10 | cloudy |
| 7. Oakville | 20Dec | 63 | 5385 | 8 | 4 | 36 | 279 | 8 | 4 | 45 | 0 | 0 | 29 | 31 | 1 | SE 0-15 | rain/sleet/snow |
| 8. Burlington | 14Dec | 64 | 12705 | 13 | 5 | 41 | 265 | 29 | 2 | 7 | 6 | 30 | 24 | 30 | 0 | NW 25-35 | clear |
| 9. Keokuk | 22Dec | 76 | 49868 | 16 | 7 | 56 | 466 | 12 | 1 | 0 | 0 | 0 | 32 | 45 | 0 | 0 | fog/cldy |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | |
| 10. Sioux City | 14Dec | 44 | 11660 | 15 | 5 | 41 | 24 | 21 | 6 | 3 | 3 | 12 | 22 | 34 | 0 | NW 10-35 | ptly cldy |
| 11. DeSoto NWR | 21Dec | 47 | 29578 | 21 | 6 | 48 | 436 | 18 | 0 | 0 | 0 | 0 | ? | ? | 0 | N 0-4 | clear |
| 12. Omaha, NE | 14Dec | 58 | 13458 | 29 | 10 | 72 | 478 | 23 | 5 | 44 | 1 | 4 | 20 | 34 | 0 | NW 0-5 | clr/ptly cldy |
| 13. Glenwood | 14Dec | 48 | 108323 | 10 | 4 | 32 | 421 | 7 | 1 | 18 | 0 | 0 | 24 | 35 | 0 | NW 5-20 | clr/ptly cldy |
| 14. Shenandoah | 21Dec | 64 | 108906 | 13 | 5 | 43 | 308 | 36 | 1 | 5 | 11 | 32 | 20 | 33 | 0 | SE 5-19 | clr/fog |
| 15. Tristate | 29Dec | 43 | 4232 | 7 | 3 | 26 | 242 | 4 | 1 | 4 | 0 | 0 | 34 | 38 | 0 | SE 0-5 | cloudy |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | |
| 16. Decorah | 28Dec | 40 | 3054 | 13 | 5 | 37 | 256 | 12 | 1 | 5 | 1 | 1 | 26 | 36 | 3 | SW 0-5 | cloudy |
| 17. Wapsi/WestL | 31Dec | 31 | 1238 | 9 | 7 | 24 | 108 | 19 | 1 | 5 | 12 | 21 | 28 | 33 | 1 | SE 5-8 | rain/fog |
| 18. BremerCo. | 14Dec | 39 | 2804 | 8 | 5 | 38 | 436 | 6 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | NW 20-35 | ptly cldy |
| 19. Mason City | 21Dec | 38 | 5239 | 21 | 8 | 53 | 350 | 22 | 1 | 1 | 11 | 21 | 22 | 37 | 2 | SW 5-20 | clear |
| 20. Spirit Lake | 28Dec | 39 | 2787 | 8 | 4 | 24 | 208 | 9 | 0 | 0 | 24 | 37 | 26 | 31 | 2 | SE 5-10 | fog |
| 21. Paulina | 14Dec | 18 | 5142 | 10 | 5 | 70 | 400 | 0 | 0 | 0 | 12 | 25 | 10 | 22 | 4 | NW 2-30 | clr/ptly cldy |
| 22. Cherokee | 14Dec | 39 | 4230 | 6 | 3 | 22 | 216 | 2 | 1 | 4 | 5 | 16 | 17 | 27 | 3 | NW 20-40 | clr/ptly cldy |
| 23. Westfield | 2Jan | 27 | 501 | 4 | 2 | 14 | 139 | 11 | 0 | 0 | 0 | 0 | 31 | 37 | 2 | SW 0-10 | fog |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | |
| 24. Lost Nation | 16Dec | 51 | 6034 | 15 | 5 | 42 | 465 | 5 | 1 | 10 | 6 | 12 | 18 | 42 | 0 | S 5-15 | ? |
| 25. North Linn | 28Dec | 45 | 2797 | 15 | 5 | 40 | 406 | 14 | 5 | 60 | 4 | 28 | 20 | 35 | 2 | SE 5-15 | cloudy |
| 26. Cedar Rapids | 14Dec | 75 | 11407 | 42 | 16 | 110 | 675 | 63 | 5 | 30 | 19 | 28 | 20 | 32 | 0 | NW 15-45 | clear |
| 27. Iowa City | 15Dec | 62 | 11226 | 36 | 12 | 87 | 786 | 48 | 2 | 19 | 11 | 30 | 22 | 25 | 0 | NW 10-20 | ptlycldy/clr |
| 28. Amana | 28Dec | 45 | 1200 | 9 | 3 | 21 | 75 | 14 | 2 | 2 | 0 | 0 | 30 | 33 | 0 | 0 | fog |
| 29. Cdr Falls/Wat | 15Dec | 53 | 4207 | 7 | 5 | 31 | 291 | 15 | 0 | 0 | 1 | 3 | 11 | 19 | 2 | N 15-25 | clear |
| 30. Marshalltown | 21Dec | 31 | 1830 | 14 | 4 | 30 | 244 | 5 | 0 | 0 | 5 | 35 | 24 | 39 | 1 | S 0-5 | clr/ptly cldy |
| 31. Eldora-Union | 14Dec | 36 | 1033 | 5 | 2 | 18 | 186 | 2 | 0 | 0 | 2 | 4 | 20 | 26 | 0 | NW 20-30 | clr/cldy |
| 32. Ames | 14Dec | 50 | 15336 | 34 | 14 | 73 | 408 | 38 | 1 | 1 | 8 | 24 | 22 | 30 | 0 | W 20-30 | clear |
| 33. Alleman | 22Dec | 32 | 5524 | 3 | 1 | 10 | 64 | 1 | 1 | 1 | 1 | 6 | 25 | 37 | 0 | S 5-10 | cloudy |
| 34. SaylorvilleR | 15Dec | 72 | 17268 | 25 | 12 | 94 | 496 | 54 | 3 | 28 | 0 | 0 | 22 | 34 | 0 | NW 10-20 | ptly cldy |
| 35. Des Moines | 21Dec | 57 | 17696 | 17 | 5 | 35 | 196 | 13 | 0 | 0 | 1 | 4 | 21 | 38 | 1 | S 4-5 | clr/ptly cldy |
| 36. Boone Co. | 1Jan | 40 | 3201 | 20 | 10 | 52 | 298 | 39 | 0 | 0 | 0 | 0 | ? | ? | ? | ? | ? |
| 37. Jamaica | 17Dec | 51 | 13701 | 8 | 4 | 31 | 323 | 14 | 2 | 30 | 0 | 0 | 32 | 33 | 0 | NW 15-25 | clear |
| 38. Sac Co. | 14Dec | 25 | 872 | 8 | 3 | 15 | 80 | 15 | 0 | 0 | 4 | 15 | 20 | 30 | 0 | W 10-20 | clear |
| 39. Ida County | 15Dec | 31 | 1785 | 4 | 4 | 28 | 284 | 5 | 2 | 2 | 4 | 5 | 13 | 46 | 0 | NNW 5-15 | ptly cldy/clr |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | |
| 40. Sigourney | 14Dec | 21 | 499 | 2 | 2 | 16 | 75 | 0 | 0 | 0 | 0 | 0 | 22 | 34 | 0 | NW 15-20 | ptly cldy |
| 41. Ottumwa | 21Dec | 39 | 2585 | 9 | 4 | 57 | 112 | 4 | 0 | 0 | 3 | 12 | 28 | 38 | 0 | NW 5-10 | ptly cldy |
| 42. Oskaloosa | 25Dec | 15 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 28 | 44 | 0 | NW 0-5 | clear |
| 43. LaRedRock | 19Dec | 70 | 11718 | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? |
| 44. Rathbun | 14Dec | 67 | 17186 | 22 | 8 | 57 | 764 | 9 | 5 | 29 | 5 | 15 | 24 | 38 | 0 | NW 30-40 | clear |
| 45. Lucas | 21Dec | 36 | 1302 | 10 | 4 | 21 | 163 | 12 | 0 | 0 | 0 | 0 | 33 | 36 | 0 | NW 5-10 | fog/cldy |
| 46. Lamoni | 14Dec | 32 | 3042 | 7 | 4 | 26 | 152 | 3 | 0 | 0 | 0 | 0 | 24 | 34 | 0 | W 15-25 | clear |
| 47. UnionCo. | 28Dec | 26 | 4574 | 4 | 2 | 14 | 67 | 2 | 1 | 8 | 3 | 18 | 28 | 35 | 0 | 0 | fog |
| 48. Montgom.Co | 28Dec | 48 | 6397 | 15 | 5 | 41 | 512 | 13 | 1 | 1 | 0 | 0 | 29 | 38 | 0 | 0 | cloudy |
| TOTAL | | 583019 | p.h.-1881 | | | | | 14205 | | | | | | | | | |

was Decorah at 40, a very good total for that part of Iowa in December. In the Missouri Valley, the veterans at Shenandoah again topped the bunch at 67, good for that region.

Table 2 A. Christmas Bird Count Data

| | Pi | Do | Gr | Gr | Sh | Ca | Wo | Gr | Am | Ma | No | Ga | Am | Ca | Re | Ri | Gr | Le | Co | Bu | Ho | |
|-------------------------|----|----|----|--------|--------|-------|------|----|-----|-------|------|-----|----|----|----|----|----|----|------|------|----|---|
| | Bl | Cr | Bl | Wh | Go | Go | Du | Wi | Bl | | Pi | | Wi | | | Ne | Sc | Sc | Go | | Me | |
| Location | Gr | Co | He | Go | | | Te | Du | | | | | | | | Du | | | | | | |
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | | | | | | |
| 1 Yellow Riv. For | | | | | | 9 | | | 8 | 376 | 1 | | | 1 | | | | | | | | |
| 2 Dubuque | | | | | | 1 | | | | 879 | | | | | | | | | | | | |
| 3 Clinton | | | | 7 | | 258 | 1 | 1 | 102 | 1096 | | 2 | 8 | | | | 15 | 1 | 125 | | | |
| 4 Princeton | | | | 3 | | 229 | 2 | | 3 | 158 | | | | | | | | | 161 | | | |
| 5 Davenport | 2 | 3 | | | | 354 | 1 | 2 | 16 | 2633 | 2 | 1 | | 1 | 3 | 1 | 1 | 1 | 91 | | 3 | |
| 6 Muscatine | | | 1 | | | 450 | 2 | | | 98 | | | | | | | | | 37 | 2 | | |
| 7 Oakville | | | 6 | | | 146 | | | 4 | 146 | | | 5 | | | | | | | | | |
| 8 Burlington | | | 5 | | | 342 | 1 | | 1 | 129 | 1 | 53 | | | | | | 3 | 21 | | | |
| 9 Keokuk | | | | | | 44 | 2 | | | 173 | | | | 1 | 8 | 1 | 2 | | 4 | 3238 | 2 | 3 |
| Subtotal | 0 | 2 | 18 | 7 | 0 | 1633 | 9 | 3 | 134 | 5668 | 4 | 61 | 9 | 10 | 4 | 3 | 16 | 9 | 3673 | 4 | 6 | |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | | | | | | |
| 10 Sioux City | | 2 | | | | | | 23 | | 7501 | | 49 | | | | | | | | 28 | | |
| 11 DeSoto NWR | | | | | 20100 | 450 | | | 3 | 2614 | 1 | | | | | | | 2 | 46 | | | |
| 12 Omaha | | | | | 8000 | 353 | | | | 703 | | | | | | | 1 | | 1 | 502 | 1 | |
| 13 Glenwood | | | 1 | | 100406 | 24 | | 4 | | 4012 | 2 | | | | 2 | | | | | 3 | | |
| 14 Shenandoah | 1 | 4 | 2 | 100000 | | 9 | | 4 | 2 | 4002 | 7 | 9 | 11 | 1 | 18 | 7 | 1 | 1 | 17 | | 1 | |
| 15 Instate | | | | 300 | | | | | | | | | | | | | | | | | | |
| Subtotal | 1 | 2 | 6 | 2 | 228606 | 831 | 0 | 31 | 5 | 18832 | 10 | 58 | 11 | 1 | 20 | 8 | 1 | 4 | 596 | 0 | 2 | |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | | | | | | |
| 16 Decorah | | | | 1 | | | | | | | | | | | | | | | | | | |
| 17 Wapsi-Gr. West. Line | | | | | | | | | | | | | | | | | | | | | | |
| 18 Bremer County | | | | | | 40 | | | | | | | | | | | | | | | | |
| 19 Mason City | | | | | | 219 | | | 1 | 1083 | | | | | | | | | | | | |
| 20 Spirit Lake | | | | | | 93 | | | | | | | | | | | | | | 1 | | |
| 21 Paulina | | | | | | | | | | | | | | | | | | | | | | |
| 22 Cherokee | | | | | | | 4 | | 1 | 125 | | | | | | | | | | | | |
| 23 Westfield | | | | | | | | | | | | | | | | | | | | 3 | | |
| Subtotal | 0 | 0 | 1 | 0 | 0 | 350 | 2 | 0 | 2 | 1209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | | | | | | |
| 24 Lost Nation | | | | 2 | | 42 | | | | 35 | | | | | 2 | | | | | | | |
| 25 North Linn | | | | | | 300 | 1 | | | 85 | | | | | | | | | | | | |
| 26 Cedar Rapids | 1 | 2 | 4 | | 1 | 156 | | | 2 | 1704 | 1 | | | | 1 | | | | 185 | 3 | 1 | |
| 27 Iowa City | 1 | 1 | | | | 135 | 3 | | 1 | 685 | | 1 | | | | | | 5 | 2 | | 3 | |
| 28 Amana | | | | 1 | | 32 | | | | | | | | | | | | | | | | |
| 29 Cedar Falls-Waterloo | | | | 1 | | 201 | | | | 402 | | | | | | | | | | | 1 | |
| 30 Marshalltown | | | | | | 315 | | | | | | | | | | | | | | | | |
| 31 Elmore-Union | | | | 1 | | | | | | 15 | | | | | | | | | | | | |
| 32 Ames | | | | 1 | | 7 | | | | 6 | | | | | | | | | | | | |
| 33 Alleman | | | | | | | | | | 4000 | | | | | | | | | 50 | | | |
| 34 Saylorsville Res | | 2 | | | | 36 | 1 | | 13 | 7000 | 3 | | 1 | | 1 | 2 | 1 | 9 | 550 | 1 | 1 | |
| 35 Des Moines | | 3 | | | | 500 | 5 | 2 | 6 | 1804 | | 4 | | | | | | 1 | 4 | 76 | | |
| 36 Boone County | | | | | | 2 | | | | 3 | | | | | | | | | | | | |
| 37 Jamaica | | | | 1 | 1 | 31 | 7009 | | 4 | 8 | 4610 | 2 | | 2 | | 1 | | 1 | | | | |
| 38 Sac County | | | | 1 | | | | | | | | | | | | | | | | | | |
| 39 Ida County | | | | | | 500 | | | | 56 | | | | | | | | | | | | |
| Subtotal | 2 | 4 | 16 | 1 | 32 | 10666 | 10 | 6 | 30 | 20408 | 6 | 5 | 3 | 0 | 5 | 2 | 3 | 18 | 863 | 4 | 6 | |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | | | | | | |
| 40 Sigourney | | | | | | 80 | | | | | | | | | | | | | | | | |
| 41 Otumwa | | | | | | 500 | | | 2 | 184 | | | | | | | | | | | | |
| 42 Okaloosa | | | | | | | | | | | | | | | | | | | | | | |
| 43 Lake Red Rock | | 6 | 3 | 1 | | 180 | 1 | | 13 | 1282 | | | | | 2 | 1 | 21 | 3 | 713 | | 1 | |
| 44 Rathbun | 3 | 4 | 3 | | 300 | 900 | | | | 447 | 3 | 2 | 1 | | | | | | 62 | 1 | | |
| 45 Lucas | | | | | | | | | | | | | | | | | | | | | | |
| 46 Lamon | | | | | | 825 | | | | 1010 | | | | | | | | | | | | |
| 47 Union County | | | | | | 12 | | | | 3500 | | | | | | | | | | | | |
| 48 Montgomery County | | | | | 110 | 235 | | | | 260 | | | | | | | | | | 1 | 1 | |
| Subtotal | 3 | 10 | 6 | 1 | 410 | 2732 | 1 | 0 | 15 | 6683 | 3 | 2 | 1 | 0 | 2 | 1 | 21 | 3 | 775 | 2 | 1 | |
| Total | 6 | 18 | 47 | 11 | 229248 | 16419 | 22 | 40 | 186 | 52820 | 23 | 126 | 24 | 11 | 31 | 14 | 41 | 34 | 5912 | 10 | 15 | |
| | Pi | Do | Gr | Gr | Sh | Ca | Wo | Gr | Am | Ma | No | Ga | Am | Ca | Re | Ri | Gr | Le | Co | Bu | Ho | |
| | Bl | Cr | Bl | Wh | Go | Go | Du | Wi | Bl | | Pi | | Wi | | | Ne | Sc | Sc | Go | | Me | |
| | Gr | Co | He | Go | | | Te | Du | | | | | | | | Du | | | | | | |

Table 2 B. Christmas Bird Count Data

| Location | Co Me | Re Br | Ba Ea | No Ha | Sh Sh | Co Ha | Ac Sp | No Go | Re Sh | Re Ta | Ro Le | Bu Sp | Am Ke | Me Pa | Gr Ne | Ri Ph | Wi Tu | No Bo | Co Sn | He Gu |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | | | | |
| 1. Yellow Riv. For. | | | 69 | | | | | | | 42 | 17 | | 12 | | | | 24 | | | |
| 2. Dubuque | 43 | | 135 | | 3 | 3 | | | 2 | 34 | 4 | 6 | 13 | | | | | | | 2 |
| 3. Clinton | 40 | | 74 | 2 | 2 | 2 | 1 | 1 | | 30 | 3 | | 21 | 1 | | 2 | 6 | | 2 | 746 |
| 4. Princeton | 75 | | 64 | 1 | | | | | 1 | 31 | 4 | | 34 | | | 42 | 71 | 14 | | 33 |
| 5. Davenport | 21 | 4 | 186 | | 2 | 3 | | 1 | | 57 | 5 | | 37 | 1 | 12 | 11 | 1 | 15 | 1 | 925 |
| 6. Muscatine | 4 | | 105 | 2 | 1 | | | 1 | | 48 | 3 | | 25 | | | 13 | 8 | 20 | 1 | 93 |
| 7. Oakville | 15 | | 129 | 1 | 1 | | | | 1 | 18 | 7 | | 10 | | | 12 | 24 | 3 | 7 | 72 |
| 8. Burlington | 107 | | 82 | | 1 | | 1 | | | 39 | 6 | | 11 | | 20 | 3 | 1 | 23 | 1 | 109 |
| 9. Keokuk | 340 | 1 | 206 | 2 | 2 | 1 | | | 2 | 33 | 4 | | 17 | | | 2 | 58 | 39 | 1 | 2000 |
| Subtotal | 645 | 5 | 1050 | 8 | 12 | 9 | 2 | 3 | 6 | 332 | 53 | 6 | 180 | 2 | 32 | 85 | 193 | 114 | 13 | 3980 |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | | | | |
| 10. Sioux City | 10 | | 3 | | | 2 | | | | 30 | 3 | | 9 | | | 17 | | | | |
| 11. DeSoto NWR | 22 | 17 | 28 | 1 | 1 | | | | | 42 | 1 | | 19 | | | 52 | 4 | 21 | | |
| 12. Omaha | 200 | | 35 | 1 | 2 | | | | | 38 | 1 | 1 | 35 | | | 5 | 11 | | | 1 |
| 13. Glenwood | | | 56 | 1 | | | | | | 19 | | | 22 | | | 39 | 14 | 20 | | |
| 14. Shenandoah | | | 130 | 3 | | 1 | | | | 34 | 1 | | 29 | | | 65 | | 61 | | |
| 15. Tipton | | | 15 | 1 | | | | | | 30 | 1 | | 20 | 1 | | | 14 | | | 3 |
| Subtotal | 232 | 17 | 267 | 7 | 3 | 3 | 0 | 0 | 0 | 193 | 7 | 1 | 134 | 1 | 0 | 176 | 43 | 102 | 0 | 4 |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | | | | |
| 16. Decorah | | | 3 | 3 | 3 | | | | | 49 | 13 | | 8 | | | 6 | 20 | | | |
| 17. Wapsi-Gr. West. Line | | | | | | | | | | 6 | | | 2 | | | 50 | 13 | | | |
| 18. Bremer County | | | | | | 2 | | 1 | | 11 | 7 | | 9 | 1 | 5 | 30 | 35 | | | |
| 19. Mason City | | | | | 1 | | | | | 15 | 4 | | 9 | | | 26 | | | | |
| 20. Spirit Lake | | | | | | | | | | | 1 | | | | | 7 | 7 | | | |
| 21. Paulina | | | | | | | | | | | 2 | | 3 | | 10 | | | | | |
| 22. Cherokee | | | 4 | | 1 | 1 | | | | 22 | 7 | | 4 | | | 31 | | | | |
| 23. Westfield | | | | 1 | | | | | | 14 | 11 | | 3 | | | 69 | 7 | | | |
| Subtotal | 0 | 0 | 7 | 4 | 5 | 3 | 0 | 1 | 0 | 117 | 45 | 0 | 38 | 1 | 22 | 221 | 75 | 0 | 0 | 0 |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | | | | |
| 24. Lost Nation | | | 2 | 8 | 2 | 2 | | | | 40 | 16 | | 29 | | 1 | 25 | 57 | | | |
| 25. North Linn | | | 2 | 1 | | | | | | 19 | 5 | | 22 | | 10 | 64 | 5 | | | |
| 26. Cedar Rapids | 1 | | 9 | 1 | 1 | 1 | | 1 | | 46 | 6 | 2 | 11 | | | 10 | | 3 | | |
| 27. Iowa City | | | 38 | 4 | | 2 | 1 | | | 58 | 14 | | 7 | | | 19 | 3 | | | 60 |
| 28. Amana | | | 3 | | | 1 | | | | 12 | 1 | | 2 | | | 8 | 14 | | | |
| 29. Cedar Falls-Waterl | 3 | | 2 | | | 2 | | 1 | | 11 | 2 | | 2 | | 4 | 10 | 23 | | | |
| 30. Marshalltown | | | 1 | | | | | | | 10 | 1 | 1 | 2 | | | 31 | | | | |
| 31. Eldora-Union | | | 1 | | | | | | | 25 | 1 | | 1 | | 2 | 3 | | | | |
| 32. Ames | | | 1 | 2 | 1 | | | | | 17 | 2 | | 17 | | 3 | 20 | | 1 | | |
| 33. Alleman | 400 | | 5 | | | | | | | 3 | | | 4 | | | 1 | | | | |
| 34. Saylorville Res | 2700 | | 21 | 2 | 2 | | | 1 | | 34 | 2 | | 24 | | | 29 | 16 | 8 | | 3 |
| 35. Des Moines | 76 | | 12 | | | | | | | 34 | 2 | | 16 | | | 1 | | | | 11 |
| 36. Boone County | | | | | 1 | | | | | 10 | 1 | | 16 | | | 12 | 18 | | | |
| 37. Jamaica | 2 | | | | 1 | 1 | | 1 | | 30 | 4 | | 8 | | | 20 | 2 | | 3 | |
| 38. Sac County | | | | | | | | | | 1 | 2 | | 2 | | | 32 | 1 | | | |
| 39. Ida County | | | 1 | | | | | | | 35 | 1 | | 18 | | | 55 | | | | |
| Subtotal | 3182 | 0 | 98 | 18 | 8 | 8 | 2 | 4 | 0 | 385 | 60 | 3 | 181 | 0 | 20 | 361 | 139 | 11 | 4 | 74 |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | | | | |
| 40. Sigourney | | | 1 | | | | | | | 24 | 2 | | 1 | | | | | | | |
| 41. Ottumwa | | | 12 | | 1 | | | | | 14 | | | 16 | | | | | | | 14 |
| 42. Oskaloosa | | | | | | | | | | | | | | | | | | | | |
| 43. Lake Red Rock | 2694 | 2 | 54 | 1 | | | | | | 17 | 1 | | 11 | | | 4 | | 16 | | 163 |
| 44. Rathbun | 6000 | | 18 | 8 | 5 | 3 | | | | 51 | 1 | 2 | 43 | 1 | | 15 | 67 | 29 | | 490 |
| 45. Lucas | | | | 1 | | 1 | | | | 27 | 8 | | 24 | 1 | | 5 | | 18 | | |
| 46. Lamon | | | 4 | 1 | 1 | | | | | 26 | 1 | | 28 | | | 3 | | 19 | | |
| 47. Union County | | | | | | | | | | 20 | 5 | | 6 | | | 5 | | 2 | | |
| 48. Montgomery County | | | 1 | 1 | 1 | | | | | 80 | 1 | | 37 | 1 | | 66 | | 6 | | |
| Subtotal | 8694 | 2 | 86 | 15 | 8 | 5 | 0 | 0 | 0 | 259 | 19 | 2 | 166 | 3 | 0 | 98 | 67 | 90 | 0 | 667 |
| Total | 12753 | 24 | 1508 | 52 | 36 | 28 | 4 | 8 | 6 | 1286 | 184 | 12 | 699 | 7 | 74 | 943 | 517 | 317 | 17 | 4725 |
| | Co Me | Re Br | Ba Ea | No Ha | Sh Sh | Co Ha | Ac Sp | No Go | Re Sh | Re Ta | Ro Le | Bu Sp | Am Ke | Me Pa | Gr Ne | Ri Ph | Wi Tu | No Bo | Co Sn | He Gu |
| | | | | | | | | | | | | | | | | | | | | |

Table 2 C. Christmas Bird Count Data

| Location | Gl Gu | Ro Do | Mo Do | Ea Sc | Gr Ho | Ba Ow | Lo Ea | Sh Ea | No Sa | Be Ki | Re He | Re Be | Ye Be | Do Wo | Ha Wo | No Fl | Pi Wo | Ho La | Bl Ja | Am Cr |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | | | | |
| 1 Yellow Riv. For. | | 198 | 5 | 2 | | 2 | | | | 4 | 6 | 44 | | 42 | 18 | | 8 | | 152 | 109 |
| 2 Dubuque | | 350 | 35 | | 1 | 1 | | | | 7 | 8 | 36 | 1 | 29 | 12 | 3 | 2 | 1 | 121 | 220 |
| 3 Clinton | 2 | 508 | 102 | 4 | 9 | 3 | | | | 3 | 12 | 60 | 1 | 124 | 21 | 18 | 3 | 101 | 263 | 339 |
| 4 Princeton | | 116 | 80 | 9 | 3 | 5 | | | | 4 | 23 | 36 | | 81 | 19 | 14 | 1 | 36 | 185 | 185 |
| 5 Davenport | 3 | 830 | 277 | 10 | 21 | 9 | 1 | | | 3 | 28 | 46 | 1 | 154 | 14 | 8 | 1 | 37 | 231 | 1304 |
| 6 Muscatine | | 307 | 258 | 9 | 7 | 10 | | | | 6 | 30 | 55 | | 113 | 31 | 22 | 1 | 98 | 301 | 172 |
| 7 Oakville | | 60 | 76 | 2 | 5 | 9 | | 1 | | 8 | 19 | 30 | | 65 | 12 | 18 | 6 | 15 | 59 | 1614 |
| 8 Burlington | | 149 | 64 | | 1 | 4 | | | | 4 | 7 | 38 | | 49 | 7 | 5 | 1 | 14 | 78 | 189 |
| 9 Keokuk | 3 | 558 | 82 | 1 | 4 | 2 | 1 | | | 3 | 11 | 39 | | 106 | 22 | 15 | 2 | 36 | 227 | 25000 |
| Subtotal | 8 | 3076 | 979 | 37 | 51 | 45 | 2 | 1 | 0 | 42 | 146 | 364 | 3 | 763 | 156 | 103 | 25 | 338 | 1617 | 29132 |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | | | | |
| 10 Sioux City | | 465 | | 9 | 3 | | | | | 3 | | 27 | | 57 | 10 | 12 | | 3 | 33 | 1387 |
| 11 DeSoto NWR | | 78 | 1 | 4 | 1 | | | | | | | 55 | | 127 | 18 | 163 | | 13 | 66 | 159 |
| 12 Omaha | | 118 | 3 | 5 | 3 | 2 | | | | 2 | | 24 | 1 | 64 | 13 | 22 | | 2 | 44 | 220 |
| 13 Glenwood | | 32 | 1 | 2 | 2 | | 3 | | | 2 | 1 | 26 | | 17 | 6 | 4 | | | 36 | 481 |
| 14 Shenandoah | | 85 | 38 | 2 | 9 | | | 1 | | 4 | 2 | 24 | | 45 | 9 | 12 | | | 150 | 29 |
| 15 Tristate | | 66 | | 3 | 12 | 2 | | | | 1 | | 48 | 2 | 61 | 8 | 20 | | | 114 | 140 |
| Subtotal | 0 | 866 | 43 | 25 | 30 | 4 | 3 | 1 | 0 | 12 | 3 | 206 | 3 | 371 | 64 | 233 | 0 | 18 | 443 | 2416 |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | | | | |
| 16 Decorah | | 147 | 4 | 4 | | 1 | | | | 4 | 3 | 41 | | 47 | 11 | 2 | 8 | | 194 | 230 |
| 17 Wapsi-Gr. West Line | | 178 | | 1 | 2 | | | | | | 1 | 11 | | 21 | 4 | 1 | 1 | | 35 | 36 |
| 18 Bremer County | | 332 | 2 | | 4 | 5 | 1 | | | | 14 | 12 | | 20 | 5 | 1 | | 28 | 45 | 153 |
| 19 Mason City | | 330 | 9 | 2 | 2 | 1 | | | | 3 | | 31 | | 56 | 14 | | | 12 | 105 | 739 |
| 20 Spirit Lake | | 47 | 2 | | 5 | | | | | | 3 | 23 | 1 | 79 | 29 | 2 | | | 58 | 26 |
| 21 Paulina | | 115 | | 2 | | | | | | | | | | 4 | | | | 3735 | 10 | 112 |
| 22 Cherokee | | 664 | | 1 | 4 | | | | | 1 | 1 | 13 | | 49 | 15 | 18 | | 112 | 57 | 273 |
| 23 Westfield | | 7 | | | 2 | | | | | | | 7 | | 20 | 10 | 6 | | | 9 | 22 |
| Subtotal | 0 | 1820 | 17 | 10 | 19 | 7 | 1 | 0 | 0 | 8 | 22 | 138 | 1 | 298 | 88 | 30 | 9 | 3887 | 513 | 1591 |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | | | | |
| 24 Lost Nation | | 252 | 6 | 7 | 4 | 6 | | | 1 | 2 | 37 | 33 | | 86 | 13 | 24 | 1 | 5 | 187 | 1562 |
| 25 North Linn | | 298 | 3 | 5 | 41 | 7 | | | | | 21 | 42 | | 103 | 12 | 4 | 2 | 2 | 120 | 173 |
| 26 Cedar Rapids | | 629 | 55 | 1 | 6 | 8 | | | | 9 | 18 | 28 | 1 | 153 | 31 | 8 | 2 | 62 | 181 | 1720 |
| 27 Iowa City | | 158 | 25 | 1 | 3 | 6 | | | 1 | 3 | 34 | 40 | | 132 | 25 | 20 | 1 | 34 | 165 | 1142 |
| 28 Amana | | 25 | 1 | 2 | 3 | 2 | 1 | 2 | 1 | | 17 | 15 | | 35 | 2 | 2 | 1 | | 75 | 100 |
| 29 Cedar Falls-Waterloo | | 145 | 38 | | 3 | 3 | | | | 1 | 1 | 12 | | 40 | 19 | 2 | | 9 | 66 | 490 |
| 30 Marshalltown | | 79 | 7 | | | | | | | | 1 | 12 | | 35 | 9 | 5 | | 10 | 32 | 134 |
| 31 Eldora-Union | | 36 | | | 1 | | 1 | | | 1 | 1 | 9 | | 17 | 6 | 3 | | 24 | 25 | 40 |
| 32 Ames | | 243 | 5 | | 4 | 1 | | | | 3 | 8 | 53 | | 98 | 8 | 5 | | 45 | 99 | 9200 |
| 33 Alleman | | 21 | | 1 | 2 | | | | | | | 4 | | 14 | 5 | | | 40 | 13 | 20 |
| 34 Saylorville Res. | | 210 | 2 | 7 | 15 | 10 | 1 | 2 | | | 1 | 35 | | 105 | 26 | 17 | | | 71 | 586 |
| 35 Des Moines | | 313 | 23 | | | 3 | | | | 4 | 4 | 23 | | 83 | 9 | 6 | 1 | 2 | 78 | 5607 |
| 36 Boone County | | 228 | 1 | | 2 | 2 | | 1 | 2 | 1 | 13 | 46 | | 43 | 24 | 4 | | 7 | 79 | 276 |
| 37 Jamaica | | 54 | | | 5 | 1 | 1 | 2 | | 2 | 2 | 13 | | 31 | 6 | 1 | | | 56 | 95 |
| 38 Sac County | | 55 | | | | 1 | | | | 1 | | 6 | | 22 | 3 | 1 | | | 13 | 42 |
| 39 Ida County | | 177 | | | | | | | | | | 2 | | 8 | 5 | 1 | | | 63 | 72 |
| Subtotal | 0 | 2923 | 166 | 24 | 89 | 50 | 4 | 7 | 5 | 27 | 158 | 373 | 1 | 1005 | 203 | 103 | 9 | 240 | 1323 | 21259 |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | | | | |
| 40 Sigourney | | 7 | | | 1 | 1 | 24 | | | | | | | | 1 | | | | 7 | 27 |
| 41 Ottumwa | | 260 | 7 | | 1 | | | | | 1 | | 15 | | 33 | 4 | 2 | | | 109 | 75 |
| 42 Oskaloosa | | | | | | | | | | | | 1 | | 2 | 1 | 1 | | | 3 | 1 |
| 43 Lake Red Rock | 1 | 49 | | 1 | 5 | 5 | 1 | | | | 1 | 21 | | 49 | 13 | 6 | | 1 | 21 | 1163 |
| 44 Rathbun | | 55 | 3 | 1 | 4 | 1 | 3 | 2 | | 4 | 11 | 15 | | 43 | 11 | 2 | | 40 | 95 | 466 |
| 45 Lucas | | 25 | 1 | | 1 | 1 | | | | | 5 | 11 | | 36 | 9 | 9 | | 30 | 49 | 104 |
| 46 Lamoni | | 27 | 4 | | 5 | | | | | | | 10 | | 21 | 2 | | | 1 | 31 | 50 |
| 47 Union County | | | | | 3 | | | | | | | 4 | | 3 | 1 | 1 | | | 13 | 565 |
| 48 Montgomery County | | 96 | | | 12 | 3 | 2 | 1 | | | | 15 | | 50 | 4 | 9 | | | 150 | 140 |
| Subtotal | 1 | 521 | 15 | 2 | 32 | 11 | 30 | 3 | 0 | 5 | 18 | 92 | 0 | 237 | 44 | 32 | 0 | 72 | 478 | 2531 |
| Total | 9 | 9206 | 1220 | 98 | 221 | 117 | 40 | 12 | 5 | 94 | 347 | 1193 | 8 | 2674 | 555 | 501 | 43 | 4555 | 4374 | 56989 |
| | Gl Gu | Ro Do | Mo Do | Ea Sc | Gr Ho | Ba Ow | Lo Ea | Sh Ea | No Sa | Be Ki | Re He | Re Be | Ye Be | Do Wo | Ha Wo | No Fl | Pi Wo | Ho La | Bl Ja | Am Cr |
| | | | | Ow | Ow | | Ow | Ow | Ow | | Wo | Wo | Wo | Wo | Wo | Wo | Wo | La | Ja | Cr |

Table 2 D. Christmas Bird Count Data

| Location | Bl Ca Ch | Tu Ti Nu | Re Br Nu | Wh Br Nu | Br Cr | Ca Wr | Wi Wr | Go Cr | Ea Bl | Am Ro | Ce Wa | No Sh | Lo Sh | Eu St | No Ca | Ru Si | Am Tr | Fi Sp | Fe Sp | So Sp | Sw Sp |
|--------------------------|----------------|----------------|----------------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | | | | | |
| 1. Yellow Riv. For. | 125 | 5 | 3 | 72 | 1 | 1 | 1 | | | | 34 | 3 | | 460 | 145 | | 10 | | | 1 | |
| 2. Dubuque | 140 | 50 | 2 | 47 | 9 | | | | | | | | | 348 | 139 | | 204 | | | 3 | |
| 3. Clinton | 257 | 35 | 6 | 88 | 18 | 2 | 1 | 6 | | 2 | | | | 1201 | 259 | | 559 | | | 52 | 4 |
| 4. Princeton | 177 | 25 | 3 | 67 | 16 | 2 | 1 | 2 | | 5 | 4 | | | 840 | 279 | | 327 | | 1 | 28 | 35 |
| 5. Davenport | 599 | 83 | 5 | 144 | 8 | 5 | 3 | 2 | | 10 | 66 | | | 2131 | 595 | 2 | 399 | 1 | 7 | 240 | 76 |
| 6. Muscatine | 353 | 81 | | 153 | 5 | 2 | 1 | 2 | | 1 | | | 1 | 1947 | 314 | | 684 | | | 22 | 3 |
| 7. Oakville | 126 | 57 | | 56 | 9 | 2 | | 2 | 2 | 1 | 4 | | | 380 | 175 | | 289 | 6 | | 15 | 14 |
| 8. Burlington | 232 | 24 | | 50 | 13 | 2 | 1 | 1 | 6 | | | | | 795 | 195 | | 176 | 1 | | 17 | 3 |
| 9. Keokuk | 274 | 88 | 1 | 44 | 6 | 14 | 1 | | 5 | 1 | 24 | | 1 | 1633 | 319 | | 121 | | 2 | 58 | |
| Subtotal | 2283 | 448 | 20 | 721 | 85 | 30 | 9 | 15 | 13 | 20 | 132 | 3 | 2 | 9735 | 2420 | 2 | 2769 | 8 | 10 | 436 | 135 |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | | | | | |
| 10. Sioux City | 252 | | | 70 | 3 | | | | 12 | 3 | 22 | | | 660 | 64 | | 48 | | | 2 | |
| 11. DeSoto NWR | 323 | 7 | 2 | 72 | 3 | | | | | | 1 | | | 1785 | 113 | | 959 | | | 5 | |
| 12. Omaha | 302 | 15 | | 72 | 11 | 1 | 1 | 14 | 1 | 2 | 12 | | | 738 | 139 | 1 | 82 | | | 6 | |
| 13. Glenwood | 88 | 9 | 1 | 21 | | | | 4 | 3 | | 60 | | | 775 | 100 | | 109 | | | 14 | |
| 14. Shenandoah | 108 | 5 | | 41 | 3 | | | | | 7 | 40 | | | 740 | 188 | | 1278 | 1 | 3 | 29 | 5 |
| 15. Tristate | 149 | 20 | | 74 | 7 | 5 | 1 | 4 | | | | | | 740 | 234 | 3 | 114 | | | 4 | |
| Subtotal | 1222 | 56 | 3 | 350 | 27 | 6 | 2 | 23 | 16 | 12 | 135 | 0 | 0 | 5438 | 838 | 4 | 2590 | 1 | 3 | 62 | 5 |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | | | | | |
| 16. Decorah | 139 | 6 | 1 | 79 | 2 | | | | | | | 1 | | 371 | 163 | | 48 | | | | |
| 17. Wapsi-Gr. West. L | 68 | | 2 | 42 | | | | | | | 2 | 1 | | 75 | 51 | | 10 | | | | |
| 18. Bremer County | 34 | | | 10 | 1 | | | | | | | | | 512 | 79 | | 30 | | | 1 | |
| 19. Mason City | 194 | | | 46 | 3 | | | | | 2 | 46 | 1 | | 768 | 48 | | 86 | | | | |
| 20. Spirit Lake | 275 | | 2 | 121 | 8 | | | | | | 7 | 2 | | 375 | 16 | | 103 | | 1 | 1 | |
| 21. Paulina | 9 | | | 10 | | | | | | | | | | 432 | | | | | | | |
| 22. Cherokee | 136 | | 5 | 47 | 2 | | | | | | | 4 | | 691 | 41 | 1 | 12 | | | | |
| 23. Westfield | 44 | | | 30 | | | | | | | | 2 | | 101 | 12 | | 44 | | | | |
| Subtotal | 899 | 6 | 10 | 385 | 16 | 0 | 0 | 0 | 0 | 2 | 55 | 11 | 0 | 3325 | 410 | 1 | 333 | 0 | 1 | 2 | 0 |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | | | | | |
| 24. Lost Nation | 310 | 23 | 4 | 92 | 6 | | | 2 | | 4 | | | | 652 | 223 | | 509 | 3 | | 6 | 6 |
| 25. North Linn | 173 | 13 | 3 | 143 | 13 | | 1 | | | 2 | 60 | 1 | | 196 | 203 | | 138 | | | 4 | |
| 26. Cedar Rapids | 495 | 71 | 2 | 152 | 7 | 2 | 2 | 4 | 1 | 7 | 54 | 1 | | 1093 | 395 | 1 | 310 | 2 | | 34 | 5 |
| 27. Iowa City | 415 | 62 | 1 | 100 | 8 | 5 | | | | 3 | 8 | | | 1186 | 408 | 1 | 544 | | | 4 | 6 |
| 28. Amana | 120 | 2 | | 33 | 6 | | | | | | 1 | | | 45 | 110 | 2 | 125 | | | 6 | |
| 29. Cedar Falls-Water | 98 | | 1 | 35 | 3 | | | | | 1 | 8 | 2 | | 766 | 79 | | 55 | | | 2 | |
| 30. Marshalltown | 84 | 14 | | 34 | | | | | | | 12 | | | 272 | 98 | | 9 | | | 2 | |
| 31. Eldora-Union | 21 | 5 | | 17 | 1 | | | | | | | 1 | | 192 | 29 | | 5 | | | 1 | |
| 32. Ames | 245 | 2 | 1 | 79 | 9 | 1 | | 1 | | | 7 | 1 | | 2145 | 135 | | 115 | | | 2 | 1 |
| 33. Alleman | 16 | 1 | | 12 | | | | | | | | | | 500 | 32 | | 57 | | | 2 | |
| 34. Saylorsville Res. | 316 | 10 | 9 | 102 | 8 | | 3 | | | 1 | 66 | 1 | 1 | 1562 | 201 | | 1030 | | | 13 | 1 |
| 35. Des Moines | 202 | 12 | | 103 | 9 | 2 | | 7 | | 14 | | | | 6778 | 161 | | 377 | | | 19 | 4 |
| 36. Boone County | 219 | 16 | 1 | 84 | 7 | | | | | | | | | 713 | 161 | | 79 | | | 2 | |
| 37. Jamaica | 115 | 4 | | 25 | 2 | | 1 | | | | | | 1 | 326 | 63 | | 286 | | | 14 | 1 |
| 38. Sac County | 45 | | | 40 | | | | | | | | | | 204 | 14 | | 1 | | | | |
| 39. Ida County | 31 | | 1 | 11 | 1 | | | | | 1 | | 1 | | 294 | 22 | | 68 | 3 | | 1 | |
| Subtotal | 2905 | 235 | 23 | 1062 | 80 | 10 | 7 | 14 | 1 | 34 | 215 | 8 | 2 | 16924 | 2334 | 4 | 3708 | 8 | 0 | 112 | 24 |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | | | | | |
| 40. Sigourney | 30 | | | 11 | | | | | | | | | | 8 | 10 | | 20 | | | | |
| 41. Ottumwa | 76 | 14 | | 12 | 1 | 1 | | 2 | 2 | | 15 | 1 | 1 | 153 | 126 | | 296 | | | 2 | |
| 42. Oskaloosa | 2 | | | 1 | | | | | | | | | | | 2 | | | | | | |
| 43. Lake Red Rock | 71 | 14 | | 32 | 3 | 1 | | | | | 2 | | 1 | 151 | 78 | | 323 | | | 12 | |
| 44. Rathbun | 160 | 23 | 3 | 41 | | | | 2 | | | | | 3 | 443 | 141 | | 253 | | | 2 | |
| 45. Lucas | 45 | 8 | | 36 | 3 | | | 1 | | | | | 1 | 49 | 47 | | 281 | | | 7 | 1 |
| 46. Lamoni | 203 | 9 | | 25 | | | | | | | | | 2 | 80 | 12 | | 125 | | | | |
| 47. Union County | 29 | 1 | | 5 | | | | | | | | | | 40 | 14 | | 53 | 3 | | 1 | |
| 48. Montgomery Coun | 117 | 2 | 4 | 61 | 2 | | | 2 | | 2 | | | 2 | 1843 | 133 | | 479 | | | 3 | |
| Subtotal | 733 | 71 | 7 | 224 | 9 | 2 | 0 | 7 | 2 | 2 | 17 | 1 | 10 | 2767 | 563 | 0 | 1830 | 3 | 0 | 27 | 1 |
| Total | 8042 | 816 | 63 | 2742 | 217 | 48 | 18 | 59 | 32 | 70 | 554 | 23 | 14 | 38189 | 6565 | 11 | 11230 | 20 | 14 | 639 | 165 |
| | Bl Ca Ch | Tu Ti Nu | Re Br Nu | Wh Br Nu | Br Cr | Ca Wr | Wi Wr | Go Cr | Ea Bl | Am Ro | Ce Wa | No Sh | Lo Sh | Eu St | No Ca | Ru Si | Am Tr | Fi Sp | Fe Sp | So Sp | Sw Sp |

Table 2 E. Christmas Bird Count Data

| | Wh Th Sp | Wh Cr Sp | Ha Sp | Da Ey Ju | La Lo | Sn Bu | Re Wi Bl | Me Sp | Ru Bl | Br Bl | Co Gr | Br He Co | Pu Fi | Ho Fi | Co Re | Pi Si | Am Go | Ho Sp | |
|-----------------------|----------------|----------------|----------|----------------|----------|----------|----------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|----------|----------|-----|
| MISSISSIPPI RIVER | | | | | | | | | | | | | | | | | | | |
| 1. Yellow Riv. For. | 1 | | | 97 | | 4 | | | | | | | 2 | | | | 55 | 957 | |
| 2. Dubuque | | | | 112 | | | 1 | | | | | | 11 | 18 | | 7 | 71 | 496 | |
| 3. Clinton | 3 | 2 | | 517 | 19 | | 26 | | | | 5 | 18 | 13 | 18 | | 1 | 109 | 1652 | |
| 4. Princeton | | 15 | | 415 | | | 452 | | 6 | | 6 | 2 | 7 | 9 | | 10 | 137 | 1247 | |
| 5. Davenport | 180 | 22 | 1 | 587 | | | 753 | | 12 | 1 | 2 | 18 | 30 | 135 | 2 | 111 | 141 | 1948 | |
| 6. Muscatine | 7 | 1 | | 364 | | | 280 | | 5 | 4 | | 128 | 8 | 101 | | 27 | 137 | 3472 | |
| 7. Oakville | 3 | 1 | | 313 | | | 6 | | | | 1 | | 2 | 2 | | 1 | 93 | 1147 | |
| 8. Burlington | 12 | | | 193 | | | 133 | | 4 | | 1 | 11 | 8 | 83 | | 52 | 189 | 744 | |
| 9. Keokuk | 2 | 2 | | 288 | 15 | | 40 | | | | 18 | 1 | 16 | 37 | | 7 | 165 | 1374 | |
| Subtotal | 208 | 43 | 1 | 2886 | 34 | 4 | 1691 | 0 | 27 | 5 | 33 | 178 | 97 | 403 | 2 | 216 | 1097 | 13037 | |
| MISSOURI RIVER | | | | | | | | | | | | | | | | | | | |
| 10. Sioux City | 1 | | | 262 | | | 2 | 1 | | | 4 | 2 | 4 | 12 | | 5 | 86 | 457 | |
| 11. DeSoto NWR | | | 43 | 412 | | | 225 | | | | 2 | 301 | | | | | 51 | 1128 | |
| 12. Omaha | 1 | | 19 | 526 | | | 45 | 3 | | | 2 | | 2 | | 1 | | 98 | 878 | |
| 13. Glenwood | 6 | | 25 | 388 | | | 4 | 5 | | | 2 | | | | | | 37 | 1467 | |
| 14. Shenandoah | 6 | | 39 | 175 | | | 124 | 77 | 43 | | 4 | | | 79 | | | 62 | 1010 | |
| 15. Tristate | 2 | | 39 | 427 | | | | 15 | | | | | 6 | | | | 45 | 1454 | |
| Subtotal | 16 | 0 | 165 | 2190 | 0 | 0 | 400 | 101 | 43 | 0 | 14 | 303 | 12 | 91 | 1 | 5 | 379 | 6394 | |
| NORTHERN THIRD | | | | | | | | | | | | | | | | | | | |
| 16. Decorah | | | | 91 | | | 8 | | | | | | 62 | | | 17 | 82 | 1178 | |
| 17. Wapsi-Gr. West L | 1 | | | 46 | | | | | | | 2 | 3 | 6 | 5 | | | 37 | 524 | |
| 18. Bremer County | | | | 97 | 91 | 2 | | | | | 1 | 1 | 8 | | 8 | | 15 | 1151 | |
| 19. Mason City | | | | 100 | | | | | 1 | | 11 | | 2 | 50 | 30 | 1 | 24 | 1160 | |
| 20. Spirit Lake | | | 2 | 67 | 106 | | 4 | | 7 | | 1 | 9 | 6 | 10 | 1 | | 71 | 1208 | |
| 21. Paulina | | | | 8 | 2 | | | | | | 2 | | | | | | 6 | | |
| 22. Cherokee | 3 | | 23 | 131 | | | 1 | | | | | | 17 | 23 | | | 116 | 1571 | |
| 23. Westfield | | | 5 | 21 | | | | | | | | 1 | 14 | | | | 17 | 19 | |
| Subtotal | 4 | 0 | 30 | 561 | 199 | 2 | 13 | 0 | 8 | 0 | 17 | 14 | 115 | 88 | 39 | 18 | 368 | 6811 | |
| MIDDLE THIRD | | | | | | | | | | | | | | | | | | | |
| 24. Lost Nation | | | | 232 | | | 155 | 1 | | | | | 14 | 9 | | 20 | 36 | 1237 | |
| 25. North Linn | 5 | | | 246 | | | | | | | | | 86 | 6 | | 2 | 21 | 455 | |
| 26. Cedar Rapids | 41 | 2 | | 605 | | | 1 | | | | 2 | 7 | 16 | 96 | 2 | 37 | 140 | 1335 | |
| 27. Iowa City | 10 | 4 | | 533 | | | | | | | 16 | 230 | 5 | 25 | | 28 | 227 | 4532 | |
| 28. Amana | 1 | 5 | | 75 | | | 1 | | | | 1 | 25 | | | | 1 | 35 | 250 | |
| 29. Cedar Falls-Water | 1 | | | 226 | 5 | 1 | 1 | | | | 1 | 3 | 4 | 61 | | 4 | 37 | 1304 | |
| 30. Marshalltown | | | | 117 | | | | | | | | | 5 | 39 | | | 64 | 372 | |
| 31. Eldora-Union | | | | 75 | | | | | | 2 | 2 | | | 23 | | 1 | 108 | 237 | |
| 32. Ames | 4 | | | 305 | | | | 1 | | | 2 | | 2 | 7 | 19 | 5 | 105 | 2288 | |
| 33. Alleman | 1 | | 6 | 63 | | | | | | | 4 | | 2 | | | 1 | 35 | 200 | |
| 34. Saylorsville Res. | 1 | | 8 | 916 | 8 | | 4 | 10 | | | 1 | 3 | 2 | 2 | 12 | 3 | 40 | 1138 | |
| 35. Des Moines | 2 | | 1 | 331 | | | | 2 | | | 1 | 2 | 1 | 138 | | 22 | 86 | 401 | |
| 36. Boone County | | | | 284 | | | | | | | | | | | 2 | 36 | 7 | 91 | 804 |
| 37. Jamaica | | | 1 | 196 | | | | | | | 1 | | | | | 2 | 73 | 579 | |
| 38. Sac County | 2 | | | 52 | 20 | | | | | | | | 1 | | | | 37 | 275 | |
| 39. Ida County | | | 11 | 141 | | | | | | | 5 | | | | | | 32 | 295 | |
| Subtotal | 68 | 11 | 27 | 4397 | 33 | 1 | 162 | 14 | 0 | 2 | 36 | 270 | 138 | 410 | 72 | 130 | 1167 | 15702 | |
| SOUTHERN THIRD | | | | | | | | | | | | | | | | | | | |
| 40. Sigourney | | | | 22 | | | | | | | | | | | | | 2 | 219 | |
| 41. Ottumwa | | | | 48 | | | | | | | | | 11 | 4 | 35 | | 43 | 568 | |
| 42. Oskaloosa | | | | 3 | | | | | | | 3 | | | 4 | | 1 | 3 | 20 | |
| 43. Lake Red Rock | 1 | 1 | | 92 | | | 1 | 4 | 1 | | | 700 | 12 | 8 | 2 | 1 | 91 | 462 | |
| 44. Rathbun | 3 | 1 | | 172 | | | 10 | 3 | 2 | | 2 | 2 | 23 | 20 | | 12 | 113 | 2881 | |
| 45. Lucas | | | | 41 | | 2 | | | | | | | 2 | | | | 111 | 301 | |
| 46. Lamoni | | | | 88 | | | | | 8 | | 2 | | | 14 | | | 29 | 376 | |
| 47. Union County | | | | 11 | | | | 1 | | | | | | | | | 200 | 90 | |
| 48. Montgomery County | | | 7 | 272 | | | 2 | 55 | 12 | 2 | 4 | 15 | 3 | | | | 8 | 2080 | |
| Subtotal | 4 | 2 | 7 | 749 | 0 | 2 | 13 | 71 | 15 | 2 | 11 | 717 | 51 | 50 | 37 | 14 | 600 | 6997 | |
| Total | 300 | 56 | 230 | 10783 | 266 | 9 | 2279 | 186 | 93 | 9 | 111 | 1482 | 413 | 1042 | 151 | 383 | 3611 | 48941 | |
| | Wh Th Sp | Wh Cr Sp | Ha Sp | Da Ey Ju | La Lo | Sn Bu | Re Wi Bl | Me Sp | Ru Bl | Br Bl | Co Gr | Br He Co | Pu Fi | Ho Fi | Co Re | Pi Si | Am Go | Ho Sp | |

I'm not sure that this is significant, but there was a report from Boone County of zero party-hours by boat, zero party-hours by dump truck, and zero party-hours by luge. Maybe too many hours in front of TV rather than birding.

REGULAR SPECIES

Above-average numbers of Double-crested Cormorant and Great Blue Heron were reported, a little surprising after the Halloween storm. Both species were recorded in all regions except the Northern Third where there was only one great blue, at Decorah.

Numbers of geese were up. The Snow Goose total was the third highest in the last 10 years, and the Canadas total was the second highest. As usual, Snows were concentrated in the southern Missouri Valley, where 99.8% were found. Canadas were found statewide. As usual, four species of geese were reported.

Numbers of all dabbling ducks were down except for Gadwall, which had its second highest total in 10 years. About 80% of the Gadwalls were at two locations; half at Burlington, no surprise, but the other half (49 birds) at Sioux City, a definite surprise.

Diving ducks also were generally down except for Greater Scaup, for which the 10-year high of 41 probably resulted from better identification of scaups. Greater Scaup may be as common as Lessers in December, and indeed this year there were only 38 Lessers. Care is needed in identifying December scaups. The two most common winter ducks, Common Goldeneye and Common Merganser set new 10-year highs, with spectacular numbers, almost 6,000 and 12,700 respectively. The open reservoirs helped greatly, as these birds move with the ice line. While 89% of the mergansers were on the three major reservoirs, about half of the goldeneyes were at Keokuk.

Bald Eagle numbers were at a 10-year high, continuing the species' recovery. There were 25% more Bald Eagles than Red-tailed Hawks, making Bald Eagle the most common December raptor in Iowa. Out of the total of 1,508, most were along the Mississippi (70%) and Missouri (18%) rivers.

Because of the open winter, red-tails and American Kestrels were also at 10-year highs, both distributed statewide. Other raptor species were in average numbers. There have been 22 Merlins counted the last four years but only seven in the previous six.

Numbers of all gallinaceous birds were down from last year, even Wild Turkey, for the first decline in turkeys in the last 10 years. Northern Bobwhite numbers were about average, but Ring-necked Pheasant and especially Gray Partridge were down significantly from their 10-year averages. Only 74 Gray Partridge were reported compared to last year's 210, and 32 of the 74 were at Davenport and Burlington! Perhaps the ice in November had an effect on northern populations.

Numbers of several less-hardy waterbirds, American Coot, Killdeer, and Common Snipe were all way down, with Killdeer at a 10-year low. These species were devastated by the November storm. There were only three coots, one Killdeer, and 17 snipe statewide.

This was a great gull year, both in numbers and variety (see Winter Field Reports). Six species were recorded, only one fewer than the best of seven last year. Both Ring-billed and Herring gull numbers were up, with no fewer than 32,000 ringbills. More than 25,000 were along the Mississippi and most of the rest were at the southern reservoirs. Only 242 were at Saylorville. The Thayer's count of five ties the previous best of last year.

Both dove species were in average numbers. While Rock Doves were fairly evenly distributed statewide, fully 80% of the Mourning Doves were in the Mississippi Valley.

The owls were a mixed bag. Given the lack of snow cover, the scarcity of Short-eared Owls is puzzling. Northern Harrier, which occupies the same habitat in the daytime, was in average numbers. Other than the absence of Snowy Owls, the other owls were present in about average in numbers.

Resident woodpeckers were average to above average in numbers, but the migratory sapsucker was at a 10-year low of only eight birds. Ice-coated trees might have caused their departure. Numbers of the other two mobile species, Red-headed Woodpecker and Northern Flicker, were about average.

The very low numbers of field flocking birds, Horned Lark, Lapland Longspur, and Snow Bunting are difficult to understand. While Horned Lark was up slightly, the other two species both hit ten-year lows, with only nine Snow Buntings counted. As 85% of the Horned Larks and 78% of the longspurs were in the Northern Third, perhaps all three species stayed north of Iowa.

Blue Jays and American Crows were plentiful, with crow numbers high due to the large roosts at Keokuk (25,000), Ames (9,200), and Des Moines (5,600+).

Chickadees, titmice, nuthatches, and creepers were at average to above average levels. In recent years these species have done well in Iowa. There was no notable influx of Red-breasted Nuthatches. Of interest was the distribution of the non-resident Red-breasted Nuthatch and Brown Creeper, both of which were virtually absent from the Southern Third. Perhaps these species, which usually occur in low numbers, are not concentrated in the south due to mild conditions relative to the rest of Iowa.

Winter Wrens occurred in average numbers, but Carolina Wrens continued to increase, reaching another 10-year high of 48 birds. The last five years have seen 177 Carolinas, whereas the five prior years had only 20. Fully 30 of the 48 birds this year were in the Mississippi Valley.

Golden-crowned Kinglet, Eastern Bluebird, American Robin, and Cedar Waxwing were all virtually absent. The first two are half-hardy species which probably departed with the November storm (neither species was found in the Northern Third), and the latter two are frugivores. Apparently there was little wild fruit for these species. Only 70 robins were found statewide, a 10-year low, as was the case with waxwings, only 554 being counted. Ten-year averages for these two species are 986 and 1,647.

Shrikes were present in average numbers, with the Northerns as far south as Rathbun Reservoir, while the most northerly Loggerhead was at Saylorville. The Southern Third had 71% of the Loggerheads.

Some observers noted that passerine numbers were down this winter. This was true in the case of the most numerous sparrow species, American Tree Sparrow and Dark-eyed Junco. Together, these were down about 35% from their 10-year averages. However, several less-hardy sparrow species including Field, Lincoln's, Swamp, and White-throated sparrows, which usually occur in much lower numbers, were much more numerous this winter. The latter three were at 10-year highs, even though the total for all three was only 492, compared with about 30,000 trees and juncos. Most (75%) of the 492 were in the Mississippi Valley. Obviously the overall effect is that fewer total sparrows were present statewide.

Only about 3,800 icterids were counted statewide, led by 2,279 Red-winged Blackbirds and 1,482 Brown-headed Cowbirds. The icterid total was a 10-year low, not surprisingly for this weather-sensitive group. What was a surprise was the 10-year high set by cowbirds. The best previous count in the last 10 years was 636. Half

of this year's total (700) were at Red Rock Lake. There were no large blackbird roosts in the state this fall. Common Grackle showed a huge decrease from last year, from 5,129 to 111, a very low total even when compared to the 10-year average of 1,536.

This year for the first time, House Finch outnumbered Purple Finch 1,042 to 413. The 413 Purple Finches is a little lower than average. The increase in House Finch numbers has been explosive: the total for the last five years is 2,430, and for the previous five years it is 15! House Finches were found statewide.

Numbers for the other finches were disappointing. There were 151 Common Redpolls, about average, but good compared to only two last year. Crossbills were present in low numbers, but also about average; it seems that a few show up most years. Pine Siskin numbers were very low; the 383 compares poorly to the average of 1,057 and recent totals of 2,000 or more. Of course, finches are erratic and show large swings in numbers. American Goldfinch was a little below its 10-year average. No Evening Grosbeaks were reported this year.

House Sparrow numbers were average, but our other weaver finch, Eurasian Tree Sparrow, is increasing significantly. There have been 47 counted the last three years, and only two in the previous seven. There appears to be a wintering (and perhaps breeding?) population established just north of Burlington.

UNCOMMON SPECIES

Despite the outstanding species count, there were no species new to the alltime list. The only possibility might be Smith's Longspur. Last year's report was not accepted by the Illinois Records Committee, which would make this year's Smith's Longspur record the first; both were on the Illinois side of the Clinton circle. Trumpeter Swan was recorded for only the second time, but this species is not (yet) on the Iowa list, so cannot be included (Table 3).

Beyond Smith's Longspur, this was not much of a year for rare birds on the CBCs. A Gyrfalcon report was referred to the Records Committee, but pending the disposition of that record, the best birds were rather ordinary. Two species were found for the fourth time: Sandhill Crane at Rathbun Res. and Black-legged Kittiwake at Des Moines. Fifth records were American White Pelican at Rathbun Reservoir and Red Rock Lake, and Mute Swan at Red Rock Lake. Eurasian Tree Sparrow at Burlington, Oakville, and Keokuk provided a sixth record. These records pale when compared to last year's haul of three firsts, two seconds, and four thirds.

Because of the good species total and lack of really rare species, one might expect that few expected species were missed. In fact, three misses could be mentioned: Ruddy Duck, Varied Thrush, and Evening Grosbeak. Ruddy Duck has been seen eight of the last 10 years, and the other two species six of the last ten. Perhaps only Ruddy Duck might be considered a surprising miss.

OTHER COMMENTS

It is important for compilers to fill out the count data section on the reporting form. Data obtained on these counts are only useful in the future if they can be standardized. Please remember this next year. I look forward to hearing from you all next year.

Box 300, Tabor, IA 51653

Table 3. Species found on three or fewer Christmas Bird Counts, 1991-92.
Number of individuals seen is in parentheses.

| | |
|-------------------------|---|
| American White Pelican | Rathbun (1), Lake Red Rock (1) |
| Tundra Swan | Princeton (2) |
| Mute Swan | Lake Red Rock (1) |
| Ross' Goose | Shenandoah (7) |
| Northern Shoveler | Davenport (2), Iowa City (2), Lake Red Rock (2) |
| Oldsquaw | Keokuk (4), Saylorville Res. (1), Lake Red Rock (1) |
| Turkey Vulture | Iowa City (1), Lake Red Rock (1) |
| Golden Eagle | Yellow River Forest (2), Dubuque (1), Burlington (1) |
| Peregrine Falcon | Saylorville Res. (1) |
| Prairie Falcon | Des Moines (1) |
| Ruffed Grouse | Yellow River Forest (5), Decorah (2) |
| American Coot | Cedar Falls-Waterloo (2), Cedar Rapids (1) |
| Sandhill Crane | Rathbun (1) |
| Killdeer | Keokuk (1) |
| Bonaparte's Gull | Rathbun (2), Lake Red Rock (2) |
| Thayer's Gull | Clinton (2), Davenport (2), Lake Red Rock (1) |
| Black-legged Kittiwake. | Des Moines (1) |
| Ruby-crowned Kinglet | Burlington (1), Decorah (1) |
| Hermit Thrush | Cedar Rapids (1), Amana (1) |
| Northern Mockingbird | Oakville (1), Keokuk (1), Tristate (1) |
| Brown Thrasher | Davenport (1), Cedar Rapids (1) |
| Yellow-rumped Warbler | DeSoto NWR (2), Tristate (3) |
| Chipping Sparrow | Lake Red Rock (1) |
| Lincoln's Sparrow | Princeton (1), Davenport (25), Muscatine (1) |
| Smith's Longspur | Clinton (2, in Illinois) |
| Eastern Meadowlark | Oakville (3) |
| Western Meadowlark | Montgomery Co. (2) |
| Red Crossbill | Clinton (1), Cedar Falls-Waterloo (12), Ida Co. (1) |
| White-winged. Crossbill | Cedar Rapids (1) |
| Eurasian Tree Sparrow | Oakville (1), Burlington (12), Keokuk (7) |

FIELD REPORTS - WINTER 1991-92

W. ROSS SILCOCK

WEATHER

This was a strange winter! After a dangerous and damaging Halloween icestorm, numbers of passerines were noticeably down according to many observers. Indeed, one (BE) who walked 4-11 miles on many days around Saylorville Reservoir and in Lucas County wrote that "the absence of passerine species of all kinds was notable ... a very strange winter." The record warm January and February allowed reservoirs and rivers to stay open all winter (Saylorville Reservoir) or almost all winter (Red Rock Reservoir, Rathbun Reservoir) and provide some of the best waterbirding ever, particularly for gulls along the Mississippi. December, January, and February averaged a balmy 29.2 degrees, the warmest winter in 61 years and fourth warmest all-time in Iowa. Snowfall was about normal, although more than average fell in the northeast and less than average in the (sunny, subtropical!) southwest. Some experts suggest that these conditions result from an El Nino in the Pacific. In a burst of anticipatory enthusiasm, one observer (JJD) suggested in late February that "we will have warblers here next week".



GENERAL PATTERNS

The severe November storms drove many of the half-hardy species from the state, resulting in a lack of mid-winter records of many passerines which usually are detected in small numbers. This group of species includes muscicapids and mimids like Eastern Bluebird, American Robin, Hermit Thrush, and Northern Mockingbird, as well as Cedar Waxwing and sparrows such as Fox, Lincoln's and White-crowned. This winter was yet another bust for species such as Snowy Owl and the winter finches; it is time for some sort of major invasion. Perhaps the most excitement was generated by the gulls, most notably Iceland. Several gull species provided good study opportunities for observers at Davenport. Fascinating indeed was the interesting list of gulls in the "study area" between Dams 14 and 15 where this gull-starved (but sun-tanned) western Iowa observer was able to watch rare gulls float past on ice floes at easy scope speed and identifiable range.

UNUSUAL SPECIES

The best records this winter involved reports which must be evaluated by the Records Committee. Three species were in this category: an amazing-if-confirmed Marbled Murrelet at Red Rock Reservoir, a possible Slaty-backed Gull at Davenport, and two reports of Gyrfalcon, one from a CBC. Probably just as good a winter record was the Pine Warbler seen by many at Pleasantville. This warbler propitiously chose the feeder of Gladys Black to make its attempt at surviving an Iowa winter. There were several records of Peregrine Falcon which may indicate a recovery somewhat like that seen in recent years by Bald Eagles. We can hope, although we also hope they leave the nesting Piping Plovers and Least Terns at the IPL Ponds alone! A

small incursion of "arctic", or, as I prefer, "*wapacuthu*" Great Horned Owls was also detected.

SPECIES DATA

* = documented; [] = record date; m.ob. = many observers

Common Loon: None lingered as late as the CBC or winter periods.

Pied-billed Grebe: The only report after CBCs was from the semi-warm Cedar L. in Cedar Rapids where 1 or 2 wintered (DLD, RPi).

American White Pelican: The birds reported on CBCs survived into Jan: 2 at Red Rock Res. until it froze 20 Jan (AMJ, m.ob.), and another at Rathbun Res. 1-19 Jan, whereafter it "soon perished" (TNJ).

Double-crested Cormorant: Non-CBC reports were of 2 at Montrose 12 Dec (SJD), and, surprisingly, an imm. at Fertile in Cerro Gordo Co. 16 Dec (RGo).

Great Blue Heron: Two were in Kossuth Co. 1 Dec, a "good find" after the November storm (MCK). Engebretsen counted 194 nests 11 Jan below Saylorville Res. on the Des Moines R., far above last year's total of 38 (BE). Mid-winter reports were of 1 in Fremont Co. 31 Jan (THK), and another wintering at Iowa City (JLF).

Tundra Swan: The only report apart from CBCs was of 1 photographed in Fremont Co. 12 Jan by Marsha Smith (WRS).

Trumpeter Swan: An adult and imm., apparently unmarked, were in Marion Co. at Runnells 29 Feb (*THK). Two birds from the Minnesota flock were wintering on the Cedar R. in Waterloo, as photographed by the Des Moines Register. Of interest were 3 adults wintering at Davenport, apparently from the Crex Meadows flock in Wisconsin (PCP). Note that this species is not yet on the state list.

Mute Swan: Several were reported, all adults, which is suggestive of escaped birds. Wild birds are more likely to be immatures as they normally disperse in fall, while adults rarely do so. An adult at Red Rock Res. was seen by many throughout the period, and another was on the Mississippi R. in Des Moines Co. 10 Jan (THK). Three adults were unexpected at Iowa City 3-4 Dec (JLF, THK).

Greater White-fronted Goose: Rare in midwinter, 1 was with wintering Canadas at Swan W.A. in Marion Co. 11 Jan (AMJ). Early migrants included 2 at Cone M., Louisa Co., 23 Feb (JLF, THK) and 3 rather far north in Dickinson Co. 23 Feb (LAS).

Snow Goose: Flocks were present through the period in SW Iowa (WRS), with 500 counted at Riverton A. 31 Jan (THK) and 1,000 at Forney L. 16 Feb (BP, LPA). One wintering with Mallards at Rock Valley was unusual (Marty Eby fide SJD). Spring migration was underway by the end of February with large flocks overhead in Sioux Co. 29 Feb (JV). Early stragglers included 50 at Rathbun Res. 5 Feb, building to a surprising 800 on 7 Feb (TNJ), 30 in Tama Co. 20 Feb (MP), and 2 at Cone M. 23 Feb (JLF, THK). 1 at Davenport with a lone Canada 9 Feb (AMJ) might have wintered (or been tame).

Ross' Goose: None were reported after CBCs.

Canada Goose: Largest wintering flocks were 2,000 at both Saylorville Res. (BE) and Rathbun Res. (THK), with up to 350 at Cedar L. (RPi). Furthest north wintering birds may have been the 225 at Mason City (RGo). Migrants were passing over Sioux Co. by 20 Feb (JV).

Wood Duck: Midwinter reports included single males wintering at Bettendorf (PCP), Johnston (BE), and Iowa City (JLF), with another (unsexed) at Cedar L. (DLD). Spring migrants appeared as far north as Cerro Gordo Co. as early as 17 Feb (JLW).

Green-winged Teal: A female wintered at Bettendorf (PCP), and 5 were at the IPL Ponds in Pottawattamie Co. 1 Jan (BP, LPA). First migrants appeared at Swan W.A., Marion Co., where 10 were seen 16 Feb (AMJ).

American Black Duck: Best count of wintering birds was the 3 at Cedar L. (DLD, RPi).

Mallard: No unusual counts were received from the usual wintering locations. At Saylorville Res. the low count was 2,000 on 19 Jan; the lake never froze (BE). Brown's L. in NW Iowa had a good wintering count of 500 (BFH); this is a power plant discharge pond like IPL Ponds.

Northern Pintail: Interesting wintering records included 7 at Pleasant Creek S.P., Linn Co. 20 Jan (DLD), and 2 females at Bettendorf throughout (PCP). The 700 at Runnells 22 Feb (JSi) was a good early spring count.

Northern Shoveler: No reports were received after 1 Jan, when a CBC bird at Coralville sewage ponds was last seen (THK), until 22 Feb, when 10 were at Runnells (JSi).

- Gadwall:** The only report of wintering birds was of 2 at the Coralville sewage ponds; 6 were there as late as 31 Dec (THK). Spring migrants appeared around 17 Feb far north in Cerro Gordo Co. (JLW).
- American Wigeon:** The only wintering bird appeared to be a female with Mallards far to the northwest at Rock Valley (JV), but a male from the CBC at Clinton was still present 4 Jan (PCP). Probably an early migrant was 1 at IPL Ponds 16 Feb (BP, LPA).
- Canvasback:** The mild conditions allowed large numbers to winter on Pool 19 at Montrose: 4,000 were there 10 Jan (THK), dwindling to 200 by mid-Jan (Brian Warson fide SJD), but 5,000 had returned by early Feb (Brian Warson fide SJD) and an amazing 25,000 appeared 21 Feb (RIC). Unlike Pool 19, Red Rock Res. froze over around 18 Jan, chasing out the 7 individuals attempting to winter there (MP). Early migrants were far to the northwest in Ida Co. by 27 Feb (PE).
- Redhead:** There were no reports after CBCs until spring migrants appeared, first at Saylorville Res. (3, BE) and Runnells (4, JSi) on 22 Feb. In recent years, wintering Redheads have been scarce.
- Ring-necked Duck:** The only January report was of 1 at Dubuque 28 Jan (RIC). First migrants were 3 at Montrose 15 Feb (THK).
- Greater Scaup:** Last in fall were the Clinton CBC birds 28 Dec, and none reappeared until two pairs were detected at Montrose 15 Feb (THK, CRF). A good count was the 60 at Runnells 22 Feb (JSi).
- Lesser Scaup:** Fall birds lingered until 3 Jan, when 5 were at L. Manawa (BP, LPA). The only wintering birds reported were up to 7 at the Coralville sewage ponds (THK). Early migrants showed at Swan W.A. on 16 Feb, when 2 were seen (AMJ).
- Oldsquaw:** A good count of 6 individuals was made this winter. Five were fall birds: 3 were at Red Rock Res. from 7 Dec (IOU field trip) to 13 Dec (PCP, SJD), with 1 remaining until the CBC there; the CBC bird at Saylorville Res. stayed until 23 Dec (SJD); and the latest was 1 at Rathbun Res. 2 Jan (THK). Unusual in spring, a winter-plumaged male was at Sandusky, Lee Co., 15 Feb (CRF).
- Black Scoter:** One was reported 13 Dec as seen by "m.ob" at Red Rock Res., but no details were provided and none of the other observers reported it. While this would be the third latest fall record, it should be discarded.
- Surf Scoter:** None reported on CBCs or during the period.
- White-winged Scoter:** Three female/imm birds were at Red Rock Res. 13 Dec (SJD, PCP), and, curiously, only a male was there the next day (THK). There were no other records, nor any on CBCs.
- Common Goldeneye:** Saylorville Res. stayed open throughout the period, allowing goldeneyes to overwinter there, with a low count of 25 on 19 Jan (BE). As many as 150 were on Red Rock Res. 11 Jan, just prior to freezeup (AMJ), and 150 were on Rathbun Res. 2 Jan (TNJ). About 50 wintered in the Bettendorf area (RPI). Highest count reported was 313 on IPL Ponds 17 Dec (SJD), and as many as 200 were on lakes in NW Iowa by 29 Feb (LAS).
- Bufflehead:** The only report after CBCs was of a male wintering on the IPTV pond in Johnston (BE). First spring migrants were 3 in Dickinson Co. 29 Feb (LAS).
- Hooded Merganser:** Two reports were received of wintering birds: 4 were on Rathbun Res. 1 Feb (TNJ) and a male, 1 of 2 birds seen 15 Dec, stayed until 21 Jan at Iowa City (JLF). Spring migrants appeared on 22 Feb; a flock of 19 at Saylorville Res. (BE), and a female on the same day on IPL Ponds (DLR).
- Common Merganser:** Large numbers remained throughout on open water on the major reservoirs. At Saylorville Res. the low was 250 on 19 Jan, with a rapid increase to 6,000 on 23 Feb (BE). At Red Rock Res. 6,000 were present 11 Jan (AMJ), but the best count was the 12,000 on Rathbun Res. 15 Jan, with 3,000 still there 3 Feb (TNJ). Migrants were in NW Iowa by 22 Feb, when 150 were in Ida Co. (PE).
- Red-breasted Merganser:** Very rare in midwinter, a male on Red Rock Res. 11 Jan (MP) was a good find. Latest in fall was a female on Saylorville Res. 25 Dec (SJD), and first in spring were 6 in Dickinson Co. 29 Feb (LAS) and 7 the same day on Rathbun Res. (TNJ).
- Ruddy Duck:** None were reported as late as the CBCs. Earliest in spring were 8 at Runnells 22 Feb (JSi), [record earliest] and only the second record for February. These birds were still present 29 Feb (THK, RIC). There were no other reports.
- Turkey Vulture:** Midwinter records of this species are extremely unusual, and so the 2 seen at Muscatine 5 Feb (CRF) were a surprise. No others were reported, although 2 were seen on CBCs.
- Bald Eagle:** Best midwinter count was 122 in Scott Co. 17 Jan, including an encouraging 51 immes. (PCP). Another good count was the 121 at L. Manawa 27 Feb (Bob Starr fide BP, LPA).

- LPa). Large numbers were found on CBCs, totalling 1,508. This is a common raptor in Iowa in winter.
- Northern Harrier:** Uncommon in NC Iowa in midwinter, singles were in Cerro Gordo Co. 4 Feb (CuN) and 5 Feb (RGo). No large concentrations were reported.
- Sharp-shinned Hawk:** No unusual reports were received.
- Cooper's Hawk:** Two were wintering in yards near bird feeders: 1 at Mason City (RGo), and another in Warren Co. (AMJ).
- Northern Goshawk:** Most Iowa records are in fall, and 8 were reported on CBCs. Only two subsequent reports were received, neither with details, and both in midwinter: 1 on 11 Jan in Clay Co. (LAS) and another in Scott Co. 5 Feb (Mark Washburn fide PCP).
- Red-shouldered Hawk:** One which has wintered in Hardin Co. the past few years returned (MPR), and another was on Credit I. in Scott Co. 18 Jan (Kelly McKay fide PCP). These were the only reports after CBCs, which counted 6.
- Swainson's Hawk:** Two intriguing documentations of what was probably the same bird from a CBC will be referred to the Records Committee.
- Red-tailed Hawk:** This species was common in NW Iowa throughout the period, with 2-3 per 10 miles (JV). Three *harlani* were reported: 23 Dec in Guthrie Co. (SJD), 2 Feb in Clay Co. (LAS), and 26 Feb in Winneshiek Co. (DC). A *kriderii* was at Sioux City 8 Dec (BFH).
- Rough-legged Hawk:** This species was plentiful throughout the state this winter. Up to 3 were seen together, including 3 kettling near Mason City 13 Jan (JLW). This was just prior to an arctic clipper.
- Golden Eagle:** Each year a few, usually immatures, are found away from the New Albin area of NE Iowa where small numbers winter each year. Most such records are from N Iowa, but a few are found along the major river valleys. This year, imms were described from Kossuth Co. 5 Dec (Rod Schmidt fide MCK) and near Plymouth in Cerro Gordo Co. 4 Dec (CuN). An adult found dead s. of Elkader in Clayton Co. on 22 Feb apparently had hit a power line (Don Menken fide JJD). More surprising was another imm n. of Burlington in Muscatine Co. 14 Dec (CRF) and an unexpected adult at Big Hollow Rec Area in Des Moines Co. 8 Jan (CRF). These records indicate a dispersal into Iowa in December.
- American Kestrel:** Midwinter numbers were good, as exemplified by counts of 19 in 62 miles in Polk Co. 7 Feb (BE) and 2-3 per 10 miles in Sioux Co. 10 Jan (JV).
- Merlin:** More of these birds are being reported in recent winters. Apart from the 7 CBC birds, 4 additional birds were reported. Two were in the same tree in Sioux Center 3 Dec where 1 wintered last year (JV), and another was in Ida Co. 5 Feb (PE). This species is expected in small numbers in NW Iowa. More unusual was a female wintering in Warren Co. (JSi), seen 4 Jan through the third week of Feb (Rick Trief fide JSi). CBC birds were found east to the Mississippi R. and south to Fremont Co.
- Peregrine Falcon:** Remarkably, no fewer than 4, possibly 5, were reported, including the CBC bird at Saylorville Res. An adult male wintered in downtown Davenport at the Centennial Bridge (PCP, JLF, THK). Single adults, both well-described, were in Ida Co. 5 Dec (PE) and Pottawattamie Co. 6 Dec (BLW). One on the Saylorville Res. CBC may have been the same bird seen in the area 23 Dec (SJD). There are very few winter records for this species. Perhaps reintroduction programs are working; however none of the above sightings involved marked birds suggesting a post-DDT recovery.
- Gyrfalcon:** Two reports, one from a CBC and the other n. of Davenport, were submitted to the Records Committee.
- Prairie Falcon:** The two reports were fewer than in recent years: 1 was on the Des Moines CBC and another in Sioux Co. 4 Jan, where the species is regular in winter (JV).
- Gray Partridge:** This species continues to do well in extreme SE Iowa: a covey of 20 were in Des Moines Co. 14 Dec on the CBC (CRF).
- Ring-necked Pheasant:** This species is the commonest game bird in Ida Co., where 150+ were counted 27 Feb (PE).
- Ruffed Grouse:** See CBC data.
- Wild Turkey:** Turkeys are doing well statewide. Largest flock reported was the 20 in Linn Co. at Pleasant Creek S.P. 15 Feb (DLD).
- Northern Bobwhite:** No indications were received as to population levels in this species. See CBC data.
- American Coot:** The only wintering birds were the 2 on Cedar L. (DLD, m.ob.). First spring arrivals were at Cone M. 23 Feb (THK).
- Sandhill Crane:** The only report was from CBCs.

Killdeer: The bad fall weather apparently moved this species out of the state, as only 1 was reported on CBCs and none were found again until 4 appeared in Linn Co. 17 Feb (DLD). As many as 25 were at Runnells by 22 Feb (JSi).

Common Snipe: None were detected wintering, and none were reported after the CBC period.

American Woodcock: One was near Glenwood as early as 23 Feb (DLR), tied with another the same day at West Des Moines (BE) [2nd earliest]. Two males were courting at Willow Slough in Mills Co. 29 Feb (BLW).

Franklin's Gull: Continuing the curious appearances of recent winters, alternate-plumaged birds were found at several locations. None were found on CBCs. One was at Red Rock Res. 7 Dec (JLF). There were two midwinter reports: 1 at L. Manawa 1 Jan (BP, LPA, DLR) and another at Saylorville Res. 9 Feb (RIC). Early spring arrivals were 2 at Saylorville Res. 23 Feb (BE).

Bonaparte's Gull: A few lingered into the CBC period, with 2 each at Rathbun Res. and Red Rock Res. No more were detected until 1 in winter plumage was extremely early at L. Manawa 20 Feb (BP, LPA) [record earliest]. There had been no previous January or February records for this species, and the earliest previous record was 10 Mar 1986 (Kent, Early and Late Dates for Iowa Birds).

Ring-billed Gull: At least a few wintered on the major reservoirs, with as many as 4,000 at Red Rock Res. as late as 11 Jan (AMJ). A rather incredible January count was the 20,000 at Pool 19 on 10 Jan (THK). Numbers had built up to 6,000 at Saylorville Res. by 23 Feb (BE).

Herring Gull: No large counts of Herrings were received. However 650 were at Red Rock Res. 24 Dec (SJD). No count was received from the Davenport area, where large numbers were wintering.

Thayer's Gull: About 7 Thayer's Gulls were found this winter. First reported were 1 adult and at least 1 first-year bird in the Davenport area 15 Dec (Davenport CBC, *BBI). The adult was reported through 7 Feb (*JLF, *THK) [2nd latest]. No more than 1 first-year bird was reported at any one time, and reports ranged through 7 Feb (*RIC, *THK). Possibly additional to the Davenport birds were 2 first-year individuals at Dam 13 on the Clinton CBC 28 Dec (*BBI); there were no further reports from this location. Red Rock Res. apparently had up to 2 first-year birds, with 1 seen 7 Dec (*THK), 2 on the CBC 19 Dec, and 1 on 24 Dec (*SJD). Finally, a first-year bird was at Des Moines on the unique date of 31 Nov (*RIC). (I know it's a leap year, but...).

Iceland Gull: A highlight of this winter's birding was what appears to be 5 different Iceland Gulls. Only recently added to the Iowa list, it appears that no fewer than 3 and probably 4 Icelands wintered in the area around Dams 14 and 15 at Davenport. Careful studies with photos indicated that two different first-year birds and a second-year bird were present (*THK, photos). The first sighting was of a first-year bird 31 Dec (*THK), seen again 1 Jan, but apparently different from another first-year bird seen 4 Jan (*THK). One of these first-year birds was seen at least through 13 Feb (*JLF, m.ob.). A second-year bird was first seen 4 Jan (*THK), and again 3 and 9 Feb (*PCP). Both observers saw a pale gull with a very light gray mantle and a dark-tipped bill. A bird identified as an adult Iceland was discovered 2 Feb and seen through 13 Feb (*PCP). This bird had a yellow bill, but the primaries were not described in detail, and differences between it and adult Thayer's Gull were not discussed. Another observer discussed a similar bird seen 17 Jan and settled for a "winter adult Thayer's/Iceland complex" (*RIC). Finally, a first-year bird was at Saylorville Res. 29 Feb (*THK, *RIC).

Lesser Black-backed Gull: At least 2, possibly 3, were seen this winter. An adult was at Cedar L. at least until 5 Jan (*THK). This bird may have moved to the Davenport area, as an adult was first reported from there 11 Jan (PCP), and seen through 8 Feb (*RLC, *THK, *JLF) [record latest]. Interestingly, a second-year bird showing some brown feathering in the gray mantle was sighted at Davenport 5 Jan (*JLF).

Slaty-backed Gull: A report from Davenport of an adult 6 Feb will be referred to the Records Committee.

Glaucous Gull: This regular species is most often reported from the Mississippi R. (where up to 4 occurred this winter) and the three major reservoirs (Saylorville, Red Rock, and Rathbun). Reports from elsewhere are unusual, as was a first-year bird at L. Manawa 15-17 Dec (BP, LPA, SJD, photos by Jim Schubert). Also unusual are reports of adult birds. This year, an adult was at Red Rock Res. 5 Jan and 9 Feb (AMJ), and another was in the Davenport area 1 Dec (PCP) through 16 Feb (THK). The only documented adult was seen 19 Dec (*JLF).

Great Black-backed Gull: Continuing the great gull extravaganza were 2 adults of this species in the Davenport area. These birds were first seen 1 Feb (*JLF) and remained until 9

Feb (WRS, TEB)[2nd latest]. One observer reported 4 adults, but I suspect the 2 drifted by on ice floes twice!

Black-legged Kittiwake: What was probably the same bird was seen on the Des Moines CBC 21 Dec (*BE) and at Red Rock Res. 24 Dec (SJD)[3rd latest]. It was a first-year individual.

Marbled Murrelet: What would be the bird-of-the-year was a well-described lone bird at Red Rock Res. 12 Dec. The record will be referred to the Records Committee. This species has occurred inland in North America previously, with all documented records pertaining to the Asian race (Sealy et al., *Western Birds* 22:145-155, 1991)).

Rock Dove: See CBC data.

Mourning Dove: One wintered far to the north at Mason City (JLW).

Barn Owl: One at Fort Madison in early February (Brian Warson fide SJD) was an interesting and unusual midwinter report. One was found dead in Cedar Rapids on 13 Feb (Cedar Rapids Gazette). Most Barn Owls winter s. of Iowa.

Eastern Screech-Owl: See CBC data.

Great Horned Owl: A small incursion of the "arctic" race (presumably the intriguingly-named race "*wapacuthu*") may have taken place, as 2 were detected in NW Iowa. One was photographed near Sioux City, where it remained for a few weeks in January (DPo, BFH). It was described as "black and white", with minimal brown tones. The other, at Call S.P. in Kossuth Co. 8 Dec (MCK), also was well-described.

Snowy Owl: Each year a few reports are received, but it seems time for an invasion. Apparently there were "several" in Lyon Co. (Marty Eby fide SJD), including one near Alford 2 Jan, considered to be the same bird seen n. of Sioux Center 22 Dec (JV), and another e. of George (DCH). Further east 1 was s. of Titonka in Kossuth Co. 1 Dec (Glen Welp fide MCK). One on a building in the Davenport area on 21 Feb was shown on TV (PCP).

Barred Owl: See CBC data.

Long-eared Owl: Best total was 4 wintering at each of two locations: Geode S.P., Henry Co. (CRF) and Hillsdale Cemetery in Mills Co. (DLR).

Short-eared Owl: Three apparently wintered w. of Iowa City, as they were seen 27 (JLF) and 28 Jan (THK). A late record for so far north was 1 at Hayden Prairie in Howard Co. 27 Dec (THK).

Northern Saw-Whet Owl: Several reports were received from all parts of the state as observers get more skillful at finding these birds. Most were singles, but 2 were in Stephens S.F., Lucas Co. 26 Jan (AMJ).

Belted Kingfisher: A midwinter report from the far north was of 1 at Mason City 9 Feb (RGo).

Red-headed Woodpecker: Present at Camp Wesley Woods, Warren Co. in midwinter on 8 Feb (AMJ). See CBC data.

Red-bellied Woodpecker: This species continues to do well in NW Iowa, where 3+ pairs reside in Oak Grove P., Sioux Co. (JV).

Yellow-bellied Sapsucker: Only one report was received after the CBC period: an imm was at a Fairfield feeder 14 Jan (DCP). Winter records are rare. Another was late as far north as Algona 7 Dec, but was not seen after the 14 Jan "Alberta clipper" (MCK).

Downy Woodpecker: See CBC data.

Hairy Woodpecker: See CBC data.

Northern Flicker: Two "red-shafted" types were reported: 1 in Ida Co. 10 Dec (PE) and another in a Jefferson Co. yard 26 Feb (CAA).

Pileated Woodpecker: Away from the Mississippi R. counties this species' distribution seems to be spotty (see Iowa Birds, Dinsmore et al., 1984). Three interesting reports were received this winter. There had been no sightings since a nesting in 1985 at Sedan, Appanoose Co., until 1 was seen there 29 Feb (TNJ). Other records of interest are along the Des Moines R. One was at the known site at Sycamore Access below the Saylorville Res. Dam 21 Dec and 9 Feb (BE). Much further up the Des Moines R., a pair was reported between Algona and Irvington during the period (MCK). These birds may have come up the Des Moines R. or from the east (MCK). Information regarding populations between the above sightings and the Mississippi R. would be of interest.

Horned Lark: No large counts were reported after the CBC period. Most interesting was a sighting of an albino in Jefferson Co. which had been in the area and apparently bred there last summer (DCP). This is significant in that it indicates that at least some Horned Larks are true residents in Iowa.

Blue Jay: See CBC data.

American Crow: The roost at Ames contained some 9,200 birds this winter (JJD).

Black-capped Chickadee: See CBC data.

Tufted Titmouse: See CBC data.

Red-breasted Nuthatch: No great influx was noted, only the usual scattered individuals. Best count was 3 at Jester Park, Polk Co., 2 Feb (THK).

White-breasted Nuthatch: See CBC data.

Brown Creeper: As usual, small numbers were found statewide, with the best one-day total 6 in Linn Co. 15 Feb (DLD).

Carolina Wren: This species continues to do well, especially in the southeast, where at least 5 were wintering in the Burlington area (CRF). After the CBC period, no reports were received northwest of Story Co., where 1 was seen 7 Feb (Jason Brueck fide JJD). See CBC distribution data.

Winter Wren: No reports were received northwest of Burlington after the CBC period. At least 2 birds wintered at Burlington (CRF, JLF, THK).

Golden-crowned Kinglet: One along the Shell Rock R. in Cerro Gordo Co. 2 Feb (CuN) was rather northerly for midwinter.

Ruby-crowned Kinglet: The only report was of two on CBCs.

Eastern Bluebird: After CBCs, only two midwinter reports: a male wintered at Glenwood (DLR), and 2 were at Cedar Rapids 6 Jan (DLD). First spring arrivals were at Glenwood 22 Feb (DLR). Few reports were received.

Townsend's Solitaire: Only one report of this regular but rare wintering species: 1 was at Stone S.P., Woodbury Co. 7 Dec (BFH).

Hermit Thrush: No reports after CBCs; did any of the CBC birds linger later?

American Robin: This was a down year for frugivores such as this species and Cedar Waxwing. CBC numbers were down, and few midwinter reports were received, with no large counts. Northerly winterers were 2 at Mason City (RGo, CuN). Spring birds arrived in mid-February, with northerly arrivals in Clay Co. by 22 Feb (LAS).

Varied Thrush: None were reported on CBCs or for the period, a first for several years. One at a Johnston feeder 24 Nov was not seen again (BE).

Gray Catbird: None reported on CBCs or later.

Northern Mockingbird: None reported after CBCs.

Brown Thrasher: Apparently 3 wintered; no information was received about survival of the 2 CBC birds (Davenport and Cedar Rapids). Singles wintered at feeders in Muscatine Co. (GeW), Iowa City (JLF), and Lamoni (JLF); feeders courtesy of Linn Tavener, Bob Dick, and Jacqueline Flowers respectively.

Cedar Waxwing: This was a poor year for waxwings. Few reports were received, and the largest flock was only 50 in Ida Co. 31 Jan (PE). The 6 in Ames 22 Feb were the first seen by the observer all winter (JJD), and 4 at the Nevada Cemetery 2 Feb were the only ones seen by the observer all period (MPR).

Northern Shrike: Scattered birds were reported south as far as Oakland 21 Jan (DLR) and L. Manawa 17 Dec (BP, LPa).

Loggerhead Shrike: Most northerly was a probable spring migrant in Hardin Co. 27 Feb (MPR). No midwinter reports came from n. of the southern two rows of counties.

European Starling: See CBC data.

Yellow-rumped Warbler: See CBCs; none were reported subsequently.

Pine Warbler: Iowa's first winter record, and possibly the best record this winter pending Records Committee treatment of the Marbled Murrelet and Gyrfalcon reports, was a bird seen by many at the Pleasantville feeder of Gladys Black (*THK, *MPR, *AMJ). This bird was seen from 12 Jan (THK) through 3 Feb (AMJ).

Northern Cardinal: In Sioux Co. wintering birds were considered rare in town but common along the Big Sioux and Rock rivers (JV).

Rufous-sided Towhee: The only report after CBCs was of a "spotted" race bird at an Ames feeder 17 Feb (DEd).

American Tree Sparrow: Best count was 350 in Johnson Co. 16 Feb (DLD). See CBC data.

Chipping Sparrow: Possibly Iowa's second winter record was an individual at the Tim Schantz feeder all period (THK). This bird was counted on the Red Rock Lake CBC and was the only record for the winter period.

Field Sparrow: No reports were received after CBCs.

Vesper Sparrow: No reports, either during or after CBCs.

Fox Sparrow: See CBC data. None were reported after CBCs.

Song Sparrow: The last one at a Boone Co. feeder was seen 15 Dec (SRL), but 2 probably wintered at Mason City where they were seen 26 Feb (RPI). No midwinter reports were received.

Lincoln's Sparrow: No reports were received after CBCs. This is a rare bird in midwinter.

- Swamp Sparrow:** Midwinter reports were from southerly locations only: singles were at L. Manawa 20 Jan (BPa, LPa) and L. Ahquabi S.P. 2 Feb (JSi).
- White-throated Sparrow:** This species was well-distributed in the state this winter (see CBC data). Unusual so far north in midwinter were 4 on 2-16 Feb in Mason City (CuN, RGo).
- White-crowned Sparrow:** See CBC data. Rather surprisingly, none were reported in midwinter.
- Harris' Sparrow:** One was far to the east near Burlington 25 Jan (CRF). Spring movement was detected in Ida Co. 29 Feb (PE).
- Lapland Longspur:** Some large flocks were seen in the northwest this winter: 900 were s. of Matlock in Sioux Co. 19 Dec (DCH); 500 were in Osceola Co. 21 Feb (LAS), and 300 were in Sioux Co. 26 Feb (JV). At the opposite corner of the state numbers were also good: 50-75 wintered in the Green Bay bottoms in Des Moines Co. (CRF).
- Snow Bunting:** As with longspurs, the best counts were from the northwest. In Dickinson Co. 300 was the largest, with many seen throughout the period. About 250 were in Cerro Gordo Co. in January (CuN). The only report from s. of I-80 were up to 8 apparently wintering at Red Rock Res. (MPR, THK).
- Red-winged Blackbird:** Midwinter numbers were low, with no reports received prior to 20 Feb, when the only sizeable flock reported occurred at L. Manawa, where 500 were seen (BPa, LPa). They were "all over" by 26 Feb, at least in Jefferson Co. (DCP). No major blackbird roosts were detected in the state this winter.
- Eastern Meadowlark:** A probable spring migrant was singing at Runnells 29 Feb (THK), and 2 were reported from Glenwood 7 Feb (DLR) by a known Eastern Meadowlark identifier but with no details. This species apparently winters in very low numbers across the southern edge of Iowa and along the Mississippi R. valley in the southeast (see CBCs).
- Western Meadowlark:** The expected wintering species statewide, a few were identified by song or call, such as 15 near Iowa City 28 Jan (THK).
- meadowlark sp.:** No counts of meadowlarks were received. Two were in Cerro Gordo Co. 29 Jan (JLW) for a northerly midwinter record, and the first spring birds arrived in Ida Co. 28 Feb (PE).
- Rusty Blackbird:** No midwinter reports were received.
- Brewer's Blackbird:** The only reports were from CBCs.
- Common Grackle:** A few wintered as far north as Sioux Co. (JV) and Cerro Gordo Co. (JLW).
- Brown-headed Cowbird:** See CBC data. None were reported in midwinter.
- Pine Grosbeak:** No reports, either from CBC or winter period.
- Purple Finch:** Few wintered; they were "sparse" at a Jefferson Co. feeder (DCP), and at another feeder in the same county numbers were the lowest since 1987-88 (CAA).
- House Finch:** This species is now common throughout the state.
- Red Crossbill:** None were found after the CBC period, during which 14 birds were seen on three CBC counts. The only other report was of 1 earlier in the period at the Durbin feeder in Linn Co. 9 Dec (JLF).
- White-winged Crossbill:** Not unlike the preceding species, only 1 white-wing was found in midwinter, at the West Branch feeder of Sally Erickson 25 Jan (JLF). Possibly the same bird was at another West Branch feeder, that of Midge Appleby, 25 Feb (JLF). The lone CBC bird was at Cedar Rapids, but others seen earlier during the period were a female at a Cass Co. feeder 1-9 Dec (DoR) and 1 in an Ida Grove pine grove 9 Dec (PE).
- Common Redpoll:** While not an invasion, a fair number of redpolls entered Iowa this winter. Good numbers penetrated well south, such as the 75 at Rathbun 26 Jan (TNJ) and 35 in Linn Co. 15 Feb (DLD). See CBC data. The latest record for the period was of 3 at Iowa City 16 Feb (RPI). Did the spring-like February weather send these birds back north?
- Pine Siskin:** Another poor year for this species. The best count was at Davenport where 20-30 were at a feeder all winter; 28 were banded 20 Feb (PCP). A few others were at feeders, but no other observer reported more than 6, these at Iowa City through the period (RPI).
- Evening Grosbeak:** None were reported on CBCs or during the winter period.
- Eurasian Tree Sparrow:** This species is well-established n. of Burlington, at least as a wintering population. Up to 50 were seen during the winter (CRF). See also CBC data.

OBSERVERS

Carol Ann Alexander (CAA), Fairfield; Brian Blevins (BBi), Davenport; Tanya E. Bray (TEB), Bellevue, NE; Dennis Carter (DC), Decorah; Robert I. Cecil (RIC), Des Moines; Raymond L. Cummins (RLC), Centerville; David L. Dankert (DLD), Cedar

Rapids; James J. Dinsmore (JJD), Ames; Stephen J. Dinsmore (SJD), Raleigh, NC; David Edwards (DEd), Ames; Bery Engebretsen (BE), Des Moines; Peter Ernzen (PE), Ida Grove; Charles R. Fuller (CRF), Burlington; James L. Fuller (JLF), Iowa City; Rita A. Goranson (RGo), Mason City; Douglas C. Harr (DCH), Larchwood; Bill F. Huser (BFH), South Sioux City, NE; Ann M. Johnson (AMJ), Norwalk; Thomas N. Johnson (TNJ), Centerville; Matthew C. Kenne (MCK), Algona; Thomas H. Kent (THK), Iowa City; Sharon R. Laub (SRL), Rippey; Curt Nelson (CuN), Mason City; Barbara Padelford (BPd), Bellevue, NE; Loren Padelford (LPd), Bellevue, NE; Peter C. Petersen (PCP), Davenport; Randall Pinkston (RPi), Iowa City; Don Poggensee (DPo), Ida Grove; Diane C. Porter (DCP), Fairfield; Mark Proescholdt (MPr), Liscomb; Douglas L. Rose (DLR), Glenwood; Donna Rourick (DoR), Atlantic; Lee A. Schoenewe (LAS), Spencer; W. Ross Silcock (WRS), Tabor; Jim Sinclair (JSi), Indianola; John Van Dyk (JV), Sioux Center; Jan L. Walter (JLW), Mason City; Gerald White (GeW), Muscatine; Barbara L. Wilson (BLW), Hastings.

Box 300, Tabor, IA 51563

AN INCREDIBLY LATE LEAST FLYCATCHER

ANN JOHNSON

The Red Rock Christmas Bird Count is always a time of anticipation for me. Some years the ice, snow, and cold north winds make the morning pass slowly and demand most birding be done by car. Other years have brought us nearly springtime weather with warm, southerly breezes. Because the weather had been remarkably mild and the lake remained free of ice, 16 December 1990 looked particularly promising. Tim Schantz and I had spent every available opportunity in the past week scouting and preparing for the count, fully believing that this may well be the year to break the Red Rock record for species. Neither of us could have guessed what the "bird of the day" would be.



Roy Godwin of Indianola joined me for his first CBC. We enjoyed the walk on Whitebreast Beach where there were a number of Snow Buntings. A first-winter Thayer's Gull gave us a good show and comparison with young herrings. We spent a short amount of time trying to find owls in some of the evergreens near the Whitebreast campground with no luck. I remembered a few cedars near the parking lot of the Stu Kuyper trails near there, and in a last-ditch effort to find a Northern Saw-whet Owl, we decided to check the area in the few minutes before lunch.

The woods were silent as we emerged from the car and headed toward the trailhead. A small bird with a strong white eye ring flew from a tree branch to a brush pile in front of us. I remarked to Roy that we just might have a Ruby-crowned Kinglet, not unprecedented but an excellent CBC bird. On further inspection it was obviously larger than a kinglet and had a longer, wider bill. It was certainly an Empidonax flycatcher. The bold eye ring and white wing bars were suggestive of a Least Flycatcher, a bird which should have left for the tropics long ago. The bird flew from perch to perch as we studied it, seemingly catching insects close to the top of the grass.

The eye ring was white and bold, and completely encircled the eye. The bill was smallish and had a dark upper mandible and a yellow-orange lower mandible. The head and face were dark gray, and the back and rump were olive. The wings were dark with two distinct white wing bars and showed very little primary projection. The tail was dark and not particularly long. The underparts consisted of a dirty white throat and a clear gray breast with no markings or wash. The belly and undertail coverts, however, had a very noticeable yellow wash. When perched, the bird habitually flicked its tail and wings. We watched it for about 15 minutes as it snatched insects near the ground in the tall grass.

After dictating an initial description, we headed for the visitor center to compile the morning counts. Our report of an *Empidonax* flycatcher was met with a considerable amount of skepticism, if not downright disbelief. After lunch, Tim and Jim Sinclair headed for Whitebreast with Roy and me not far behind. Schantz and Sinclair found the bird with very little effort and heard it utter a "whit". Tim was able to get close enough for a few photos which would identify the bird as *Empidonax* species. In sorting through all of the characteristics, we all came to the conclusion that this was not a vagrant western empid but in all likelihood an incredibly late Least Flycatcher.

The identification of *Empidonax* flycatchers requires studying and assessing as many characteristics as possible. Bill shape and size varies considerably among the different species, but it is difficult to assess in the field unless the bird is directly overhead. Of the identifying marks we could see, the combination of short primary projection, bold white eye ring, strongly contrasting white wing bars, back color, clear rather than vested breast, and bill color and pattern indicated this bird could be identified as a Least Flycatcher. The call note heard by Schantz and Sinclair added evidence to this decision.

The next night, Tim called me with the news that a Pacific-slope Flycatcher had been identified in Pennsylvania. I retrieved my documentation, and we again discussed all the details. The possibility of a vagrant western species was raising some self-doubt about our identification, so Tim decided to go back early the next morning to double check our identification. Luckily the ice storm blanketing Iowa that morning was moving slowly enough that Tim could again observe the bird and confirm our earlier details. We assume the flycatcher succumbed to the weather shortly thereafter.

Our identification was based on the best available information. The chart and information in Kaufman's book (1990) were most helpful. One difficulty we encountered was a lack of detailed information on molt sequences since most flycatchers leave North America before mid-December. The bright white wing bars and eye ring would indicate an adult bird. Pre-basic molt in adult Least Flycatchers, however, should occur on the wintering grounds and fall birds would show wear on the flight feathers (Pyle et al. 1989). Although we never had the bird in the hand to be certain of feather condition, the perceived lack of feather wear suggests that the molt occurred in North America, surely a most unusual happening.

Empidonax flycatchers winter in the tropics where insects, their primary diet, are plentiful. Interestingly enough, some empids, including the Least Flycatcher, supplement their diet with berries and seeds (Ehrlich et al. 1988). If this bird had been in the area around the first of December when there was a heavy snowfall, this supplemental food supply would help explain its survival.

Because *Empidonax* flycatchers are so difficult to identify to species, there is a tendency to identify them just to genus. With the latest record for an empid in Iowa being 16 October (Dinsmore et al. 1984) however, it behooved us to try to identify it to species. The influx of good identification information over the past several years

proved to be extremely helpful. Improved optics now allow for clearer and more detailed observations. Techniques used heretofore exclusively by banders, such as length of primary projection are now used in field identification. As always in difficult identification situations, not all birds may be safely identified. In this particular case, however, we had seen many field marks and heard the bird call. Tim's extensive experience with western empids increased our collective confidence. After consideration of the difficulties in identifying *Empidonax* species, the Records Committee accepted the written documentation as a Least Flycatcher - a phenomenal and unprecedented Iowa Christmas Bird Count record.

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532 120th Avenue, Norwalk, IA 50211

I.O.U. BUSINESS

BOARD OF DIRECTORS MEETING

Saturday, 7 December 1991, North Elk Rock State Park, 1:00-4:00 p.m.

Members present: Ann Barker (presiding), Bob Cecil, Pam Allen, Eloise Armstrong, Diane Porter, Mark Proescholdt, Harold White. Others present: Jim Dinsmore, Ann Johnson, Tom Kent.

Reports

Minutes for the 13 September 1991 meeting were approved as distributed with two corrections (motion by Allen, seconded by Cecil).

Treasurers report: Allen reported that 1992 dues are being paid at a good rate. The fall meeting had excess revenues of \$78.25. Allen asked for a clarification of allocation of Big Day contributions. Minutes from the spring 1987 Board of Directors meeting stated that proceeds were to be 75% to the endowment fund and 25% to I.O.U. projects, with expenses to be paid from the general fund. It was moved (Allen, seconded by White) to allocate Big Day revenues as follows: 75% to the endowment fund and 25% to special projects fund (which will replace the Birdathon fund); and to pay committee expenses from the general fund. Motion carried. This will be effective with the 1992 calendar year.

Records: At its September meeting, the committee chose Tom Kent as its new Secretary. Kent reported that former Secretary Carl Bendorf has finished the 1989 report and is completing the 1990 report. The committee has finished the first round of review of winter and spring 1991 records. It has compiled a new official checklist which will be published in the next issue of *Iowa Bird Life*. Kent asked for clarification of responsibility for production and distribution of the field checklist. It was moved (Porter, seconded by Allen) that the Treasurer be responsible for printing, selling, and financial record keeping of the field checklist. The motion was amended (Armstrong, seconded by White) to include all other I.O.U. materials. The amendment passed, and the amended motion passed.

Kent also asked for clarification of responsibility for archiving field reports, documentations, and photographs. Dinsmore was reassured recently that the Iowa State University Library is willing to continue to act as the official repository for I.O.U. materials. Duplicates of all materials sent to the library must be kept for the Records Committee's use. After discussion, the board agreed to

- allocate \$200 for archiving old materials. It was moved (Cecil, seconded by Porter) to make the Records Committee officially responsible for archiving photographs submitted to the I.O.U. as well as records for all birds, whether officially reviewed or not. The motion carried.
- Membership: The recent mailing to feeder survey participants netted about 50 new I.O.U. members. Porter reported for chair Jim Sinclair that the committee met this morning and discussed ways to increase meeting attendance. Dinsmore reported that supplies of the membership brochure have run out. The board gave him permission to reprint the brochure.
- Publications: No report. The committee has not met.
- Library-Historical: No report. The committee has not met.
- Big Day: The Big Day raised \$378 this year. Co-chairs Eugene Armstrong and Ray Cummins are encouraging more participation in the future.
- Breeding Bird Atlas: Chair Carol Thompson submitted a written report of the committee's 9 October meeting in Ames. Publication format, maps, and statistics to be compiled were discussed. A template for species descriptions was formulated. Response to the call for artwork was poor; the committee plans to use more photographs.
- Education: A written report was submitted by Rick Hollis. The committee plans to have the booklet finished and printed by fall 1992. Cost per booklet is estimated at \$.75. Along with some free copies, the remainder would be sold for \$1 each. The committee has obtained permission from Massachusetts Audubon Society to adapt some of their material for use in our publication. Artwork is being arranged. The board expressed its concern about how the booklet will be distributed. Mark Proescholdt will discuss this with the committee.
- Spring Bird Count: An ad hoc committee consisting of Sue Stroyls (chair), Pete Petersen, Ross Silcock, and Barb Wilson was appointed at the fall meeting to plan an annual spring bird count to be held on the Sunday after the Saturday of the Illinois Spring Count. The committee met at the fall meeting and prepared a budget request of \$200. However, no progress report was presented at this meeting, and the status of the project is unknown. Barker will attempt to contact Stroyls. The Board expressed concern about how the project is to be set up, and specifically felt that a plan which included a format for submitting and published the results should be approved prior to implementation.
- Nominating: Chair Carol Thompson has indicated that the committee has nearly completed a slate of officers and board members to run for election at the spring meeting. Board members agreed that the membership should be encouraged to make nominations from the floor during the elections.
- I.O.U. Display: Rick Hollis submitted a written update. A membership list will be kept with the display for reference. Several ideas have been proposed to attract more attention to the display.
- Birdline: Jim Fuller sent a written report. No further information was available on the 800 number or the computer bulletin board. The number of calls and reports to the Birdline continues to increase. He will forward a year-end report to the board via the President. This will appear in *I.O.U. News*.

Old Business

- Upcoming meetings: Cecil summarized his work on the next three meetings. Plans for the spring 1992 meeting are set for Camp Io-Dis-E-Ca near Cedar Rapids on 15-17 May. The Upper Iowa Audubon Society has issued an invitation to host the fall 1992 meeting 11-13 September at a camp near Lansing. It was moved (Proescholdt, seconded by Allen) to accept the invitation. The motion carried. At the Board's request, Cecil has been checking into the possibility of holding the spring 1993 meeting in southeastern Iowa. The idea of holding a meeting somewhere in northwestern Iowa was discussed.
- Ann Johnson has made preliminary plans to hold a field trip 11 April 1992 to observe prairie chickens near Mt Ayr. Mel Moe of the Iowa Department of Natural Resources will lead the trip.
- As directed by the Board at its last meeting, Rick Hollis and Jim Fuller are writing to owners of restricted sites such as power companies to try to gain access for I.O.U. members for birding purposes.
- At the Board's request, Jim Fuller wrote Iowa D.N.R. director Larry Wilson urging quick repair of dike breaches at Otter Creek and Big Marsh. Wilson replied promptly, thanking the I.O.U. for its concern and assuring us that the breaches had been repaired.
- The issue of shared costs reimbursements was raised at the September meeting. The need for a policy is evident, since the Records Committee has requested funds in its budget to cover costs of computer hardware, software, and supplies. Besides the Records Committee, others who shoulder such costs on their own include field reports editors, the *I.O.U. News* editors, the *Iowa Bird Life* editor, and the treasurer. White moved (seconded by Armstrong) that the Board direct Bob Cecil to contact other state organizations to determine their policy. Motion carried.
- Pam and Reid Allen recently prepared a membership list which was mailed to all members with the latest *Iowa Bird Life*. The back of page one was printed in error and should be crossed off entirely.

The Board agreed with Allen that additional copies should be sold to members for \$2. A notice to that effect will be put in the journal. New members' names will be listed in the newsletter. The Board expressed its gratitude to the Allens for their efforts on this project.

New Business

Jim Dinsmore obtained prices on I.O.U. t-shirts; the Board agreed that 36 should be purchased for sale to members.

A proposed budget for 1992, listing total expenses of \$9590 and estimated income of \$9670 was distributed and discussed. On a motion by Allen, seconded by Armstrong, the budget was approved as proposed.

TREASURERS REPORT--1991, PAM ALLEN, TREASURER

BALANCE SHEET FOR THE YEAR ENDED 31 DECEMBER 1991

CURRENT ASSETS

| | | |
|--------------------------------|-----------|-------------|
| Cash in bank (see note 1) | 8,502.25 | |
| Cash in bank (see note 2) | 1,014.34 | |
| CD (see note 3) | 20,000.00 | |
| CD (see note 4) | 3,108.13 | |
| Interest on CD (see note 5) | 1,550.00 | |
| Interest on CD (see note 6) | 178.42 | |
| Total Assets, 31 December 1991 | | \$34,353.14 |

| | | |
|--|-------------|-------------|
| Assets as of 31 December 1990 | \$30,254.00 | |
| 1991 addition | 4,099.14 | |
| Total liabilities, fund balance, and 1991 addition | | \$34,353.14 |

FUND BALANCE BREAKDOWN

| | | |
|------------------------|----------|-----------|
| Birdathon (see Note 7) | 1,512.05 | |
| Book royalties | 2,859.34 | |
| Endowment Fund | 3,768.49 | |
| Project Fund | 84.76 | |
| Endowment Fund Total | | 8,224.64 |
| Life Memberships | | 6,040.00 |
| Birdline Fund | | 511.90 |
| Breeding Bird Atlas | | 1,002.59 |
| Meeting fund | | 1,191.13 |
| Operating Fund | | 17,382.88 |

| | | |
|--------------------------------------|--|-------------|
| Total Fund Balance, 31 December 1991 | | \$34,353.14 |
|--------------------------------------|--|-------------|

SUPPORT AND REVENUES 1991

SUPPORT (Contributions and gifts)

| | |
|---------------------|--------|
| Book royalties | 41.69 |
| Breeding Bird Atlas | 10.00 |
| Endowment Fund | 304.29 |
| Iowa Bird Line | 177.00 |
| Project Fund | 84.76 |
| Unspecified | 528.00 |

| | | |
|-------------------------------|----------|-----------|
| Total contributions and gifts | 1,145.74 | |
| Membership/subscriptions | | |
| Regular member | 5,228.00 | |
| First family member | 1,365.00 | |
| Second family member | 366.00 | |
| Third + members | 38.00 | |
| Life members | 500.00 | |
| Institutional members | 789.00 | |
| Total membership revenue | 8,286.00 | |
| Sales | | |
| I.O.U. materials | 540.75 | |
| I.B.L. back issues | 62.50 | |
| Total sales revenue | 603.25 | |
| Interest income | 1,989.76 | |
| Meeting income | 100.36 | |
| TOTAL SUPPORT AND REVENUES | | 12,125.11 |

EXPENSES

| | | |
|-----------------------------------|----------|----------|
| Publications Committee | | |
| Iowa Bird Life | 4,117.56 | |
| I.O.U. News | 1,297.13 | |
| Misc.-book binding | 104.00 | |
| Total Publications Committee | 5,518.69 | |
| Committee/officer expenses | | |
| President | 229.92 | |
| Treasurer | 405.71 | |
| Vice President | 29.28 | |
| Education Committee | 50.00 | |
| Membership Comm. | 276.49 | |
| Records Committee | 288.04 | |
| Breeding Bird Atlas | 207.41 | |
| Iowa Bird Line | 175.02 | |
| Materials | 137.60 | |
| I.O.U. Display | 280.80 | |
| Membership Directory | 427.01 | |
| Total other organization expenses | 2,507.28 | |
| TOTAL EXPENSES | | 8,025.97 |

Note 1. Norwest Bank, Cedar Falls, Iowa

Note 2. First National Bank, Ames, IA

Note 3. 12 month CD, maturing 26 June 1992

Note 4. 3 month CD, maturing 26 March 1992

Note 5. Interest earned on \$20,000 C.D. at 31 December 1991

Note 6. Interest earned on \$3,108.13 C.D. at 31 December 1991

Note 7. Per board action (on 7 December 1991), all Birdathon funds now collected will be allocated as follows: 75% to the Endowment Fund and 25% to a Project Fund;
\$339.05 total collected in 1991 and allocated according to these percentages.

